WIRELESS INNOVATION AND CONSUMER PROTECTION

HEARING

BEFORE THE

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OF THE

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HOUSE OF REPRESENTATIVES

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WIRELESS INNOVATION AND CONSUMER PROTECTION

WEDNESDAY, JULY 11, 2007

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TELECOMMUNICATIONS AND THE INTERNET,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:05 a.m., in room 2123 of the Rayburn House Office Building, Hon. Edward Markey (chairman) presiding.

Members present: Representatives Doyle, Harman, Gonzalez, Inslee, Rush, Eshoo, Stupak, Green, Capps, Solis, Dingell, Upton, Hastert, Stearns, Shimkus, Pickering, Radanovich, Walden, and Ferguson.

Also present: Representative Blackburn.

OPENING STATEMENT OF HON. EDWARD J. MARKEY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF MASSACHUSETTS

Mr. MARKEY. Good morning. Today the subcommittee will explore several wireless issues, including the role of States in regulating the terms and conditions of wireless service, consumer protection, and enforcement issues, as well as how to promote greater innovation and consumer freedom in the marketplace for wireless devices and applications.

The wireless industry has suggested that Congress should preempt States from regulating the terms and conditions of wireless services as it did over a decade ago with respect to prices for wireless services. Many States have initiated attempts to take action to provide consumer protection policies for their residents, particularly with respect to regulations aimed at wireless contract terms, early termination fees, privacy issues and several other issues.

To the extent that wireless service is by nature an interstate service, this hearing will provide an opportunity for us to explore whether further preemption is advisable, how consumer protection can be enhanced if regulatory treatment is nationalized, and how best to ensure rigorous enforcement of consumer protection policies in such a regime.

With respect to wireless innovation, just over a week ago, people stood in line, slept overnight, so that they could get one of these, an iPhone. The iPhone highlights both the promise and the problems of the wireless industry today. On the one hand, it demonstrates the sheer brilliance and wizardry of the new technologies which are available in wireless engineering today. This cutting-edge technology breaks new ground with regard to the technology that consumers can have in their pocket, and undoubtedly consumers will cherish this device as though it is a part of their family. But at the same time, the advent of the iPhone raises questions about the fact that a consumer cannot use this phone with other wireless carriers and that consumers in some areas of the country where AT&T doesn't provide service, that they can't use it actually in some neighborhoods at all. And that is because the iPhone is used exclusively with AT&T's wireless plan. Moreover, even though consumers must buy this iPhone for the full price of $500 or $600, AT&T wireless reportedly still charges an early termination fee of apparently $175 for ending the service contract early, even though the phone cost wasn't subsidized and a consumer can't even take it to use it with another network provider.

This highlights the problems with the current marketplace structure where devices are provided by carriers, portability of devices to other carriers is limited or non-existent, and many consumers feel trapped having bought an expensive device or having been locked into a long-term contract with significant penalties for switching.

I would note that a witness today, Verizon Wireless, remains an anomaly in the industry by prorating its early termination fees, and I applaud them for taking such a step.

It is becoming increasingly clear, however, that wireless carriers are exerting far too much control over the features, the functions, and applications that wireless gadget-makers and content entrepreneurs can offer directly to consumers. I believe that this is stultifying innovation and unquestionably diminishes consumer choice. The freedom to innovate in the wireless marketplace for gadgets and applications could unleash hundreds of millions of dollars in investment and create new jobs. Consumers would see more phones with WiFi or WiMAX chips incorporated into wireless devices, and application providers could avail consumers of the opportunity to obtain new content and other technologies that enhance the consumer experience and provide additional competition.

Policymakers should try to figure out how to explore and promote greater innovation in the wireless marketplace and empower entrepreneurs and consumers with greater freedom. This was the idea behind the so-called Carterfone decision in the late 1960s when the FCC broke the stranglehold that Ma Bell had over the black rotary dial phone that consumers used and allowed unaffiliated manufacturers to provide such devices in the marketplace. The result was incredible innovation and an unquestioned policy success.

The FCC has a rare chance to foster similar innovation in the wireless marketplace in the upcoming auctions. As I have suggested previously, the FCC should seize this opportunity to create an open-access opportunity for wireless service in this auction and should insist upon Carterfone-like principles applying to a significant portion of the licenses to be offered. Recent comments by FCC Chairman Martin that he is poised to embrace these policies in a proposal for auction rules is a step forward and is welcomed news.

I encourage the FCC chairman and his colleagues on the FCC to maximize the benefits these policies can bring to consumers and the high-tech economy in their upcoming decision.

I look forward to hearing from our witnesses today.

I now turn to recognize the ranking member of the subcommittee, the gentleman from Michigan, Mr. Upton.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Well, thank you, Mr. Chairman. As we listen to today's witnesses and as we debate the many issues confronting wireless, I think it's important that we keep our focus on what is indeed best for the consumer. We need to ensure that sufficient spectrum is made available so that the wireless industry can continue to innovate, like with the iPhone, thereby enhancing consumer choice through the operation of market forces.

Unfortunately, many of the policy proposals that face us and the FCC could well have the opposite effect of stifling innovation, and it is the consumer that will ultimately lose. We need to take care so as to not adopt policies that would set back the highly competitive wireless market. I don't think that it would be productive to adopt a regulatory posture that in any way emulates policies that apply to the past to a monopoly. None of the nationwide wireless providers have the ability to control the market for wireless devices which is occupied by a wide variety of manufacturers. The wireless service market is vigorously competitive with four national wireless providers as well as several large regional providers. In fact, 98 percent of consumers in 2005 lived in counties served by at least three facilities-based providers and 94 percent lived in counties served by at least four, according to the FCC. Even more facilities-based competition is on the horizon from the winners of the recent advanced wireless services auction such as cable operators and possibly from winners of the 700 MHz auction as well. So no matter how you slice it, forced network neutrality smothers investment in a competitive market and in the end would leave consumers worse off and probably with fewer choices.

The iPhone is a wonderful and innovative new product and may very well set a new industry standard for mobile devices, and its early success is an indication that the wireless market is indeed working. Competition in the wireless market spurs carriers to innovate. They're forced to constantly build a better mousetrap in order to attract customers to their services or to keep customers moving to other competitors. The iPhone is the newest mousetrap, and now other carriers will be working to top it. Each month it seems like a new state-of-the-art device hits the store shelves. New products foster greater innovation and consumer choice. The winners are not just AT&T and Apple or the companies that come out with the next hot device to top the iPhone, the winners are American consumers. And if the FCC or Congress wanders down the wrong path and makes the wrong policy choices, the ability of the wireless to live up to its potential as the third pipe will be greatly hindered or eliminated altogether. There is an old saying that no good deed goes unpunished. Imposing Carterfone rules or other unnecessary burdensome regulations on the wireless industry would certainly punish the good deed that emanates from providing new, innovative services and devices to consumers. So we must tread carefully. And in my view the most important issue facing us is the need for the FCC to draft proper rules for the 700 MHz auction.

Recently a group of my colleagues joined with Ranking Member Barton and myself in sending a bipartisan letter to FCC Chairman Martin. In our letter we noted that placing conditions on the spectrum will reduce the revenues that the 700 MHz auction would otherwise generate. More importantly, it would prevent us from realizing the spectrum's true potential for consumers. That is especially the case with regard to both network neutrality and device unbundling mandates. Keep in mind that anyone can bid on the spectrum, anyone; and if they pay a fair market price, they are free to follow an open-access model if they choose.

Mr. Chairman, I ask that a copy of the letter that we signed be inserted into the record of today's hearing, and I would also finally note that the ITC, International Trade Commission, last month issued a decision that is likely to have a profoundly negative impact on the wireless industry and this country. This decision, part of a patent dispute between Broadcom and QUALCOMM, will prevent the introduction of new handsets that rely upon a chip that the ITC found infringed on Broadcom's patent. Thus, new wireless technologies may well be kept from the marketplace, effectively freezing wireless innovation. The U.S. Trade Representative, Ms. Schwab, has been given the authority to overturn the decision, and many of us are actively encouraging her to do exactly that. We are not taking a position on the merits of the patent case, but we are arguing that the remedies imposed in the ITC ruling will have an unnecessarily severe impact on consumers and innocent third parties, and it would be truly ironic that despite the best effort of those here in Congress and of the FCC that the ITC ruling could undermine policies that are designed to spur innovation and enhance consumer welfare.

Mr. Chairman, I see my time is expired so I yield back.

Mr. MARKEY. Before we close on the gentleman, without objection, the gentleman's letter will be included in the record at the appropriate point. The gentleman's time has expired. The Chair recognizes the gentleman from Pennsylvania, the vice chairman of the subcommittee, Mr. Doyle.

OPENING STATEMENT OF HON. MIKE DOYLE, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. DOYLE. Thank you, Mr. Chairman. Mr. Chairman, before I start, I understand today is your birthday, am I right? Well, I just want you to know that I saw you in line last night at the midnight premiere of the new Harry Potter movie, and I hear you are a really big fan. So I pulled some strings, and I have got to tell you, Eddie, K Street is falling all over themselves to make you happy. And I was able to get a copy of the new Harry Potter book before it comes out. Now, when they handed it over to me, I was kind of surprised by the title. It seems kind of wonky, and the cover, I had no idea that Harry Potter looks like Chairman Kevin Martin. The resemblance is really quite striking. And this wizard guy, I can't place who he looks like. But anyway, I want to present you with a brand new copy, hot off the presses, of Harry Potter and the Order of the DTV Spectrum Auction. Can you put that up on the television for us, please. I think we have some video of this, Eddie, for people to see.

Mr. MARKEY. I have not aged well. No choice about it.

Mr. DOYLE. Now, Mr. Chairman, if you open up the book, and I can't get around why all the pages are blank, but the rumor is that Harry Potter just finished the first draft but it still has to go through some editing by other students at the Hogwarts eighth floor. So luckily, Harry has promised me you will get the pages just as soon as he is finished talking about it to the press. That being said, I am not sure you are going to like the story he has to tell. Well, happy birthday, Mr. Chairman.

All silliness aside, I think this is a great hearing, and I look forward to the witnesses' testimony. In the latest Newsweek, Steven Levy writes about the iPhone and says that if 1967 was all you need is love, then 2007 is all you need is AT&T activation, and therein lies the issue that we come to look at today.

Over the months and the years to come, what will drive the most complaints about the iPhone, the lack of 3G speeds, no voice dialing, the risk of fingertip frostbite trying to make a call in winter, or will it be that the phone costs over $2,300 over the life of the contract and runs on what Consumer Reports says is the worst or next-to-worst network in 19 of the top 20 markets?

The iPhone could still change the world and be available for any consumer on any network, but we won't know until 2012, the year that AT&T's American exclusivity reportedly runs out. Now, since the iPhone is going to run on T-Mobile's network in Germany, it could be tweaked to run on T-Mobile stateside, but to do so would require hacking and other tricks out of reach to the average user like me.

There is a lot to talk about in Washington about who is really the decider. Well, I think it is time the consumer becomes the decider of what they want their phones to do, not the cell phone carriers. The draft 700 MHz auction order at the Commission is a good start, but as I read it, it's not enough to ensure that consumers have a new provider to enjoy strong competition. As it stands, grandma Bell has over half the wireless market using advantages like free spectrum in the 1980s, the ability to get exclusives like access to tunnels in the Metro in DC and others. The Bells are back with vigor. As it stands now, our cell phone carriers buy the phones from the manufactures, and those carriers decide what features we get to enjoy. Instead in Europe, that isn't always the case. But how can we judge if that is the model Americans would prefer given the opportunity or the regulatory pressure? Do we know if consumers pay less per minute they actually use to talk verses what they get in a bucket of minutes? Do they pay less for a phone when they buy it up front or over time? All that being said, Mr. Chairman, and on the other issue coming before us today, I just want to say that I don't have any philosophical objections with a national framework for wireless consumer protection standards. In my State, the wireless industry lobbied successfully to prevent our PUC from stepping in, and our attorney general didn't sign a consent decree with the wireless industry and 30 some-odd other States to create a regulatory framework. So folks in my district could very well be better off with robust consumer protections available to all American consumers and businesses.

I hope everyone can work together in good faith. A state-by-state patchwork might most severely affect smaller wireless carriers which frankly have some of the most pro-consumer offerings including unlimited calling, no early termination fees, and affordable rates.

Thanks, Mr. Chairman, and I yield back the balance of my time.

Mr. MARKEY. I thank the gentleman, and I thank the gentleman. I will keep this forever. This is great, a lot of imagination. Thank you.

The Chair recognizes the gentleman from Illinois, Mr. Shimkus.

Mr. SHIMKUS. I will waive, Mr. Chairman.

Mr. MARKEY. The Chair recognizes the gentleman from Mississippi.

OPENING STATEMENT OF HON. CHARLES W. "CHIP" PICKERING, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI

Mr. PICKERING. Mr. Chairman, thank you, and happy birthday. Let me first start by thanking you for this hearing. It is an important hearing addressing critical issues at a very pivotal time with the FCC coming out probably today with a draft order concerning many of these issues in the 700 MHz.

As we look at the context of where we are today, I do think, Mr. Chairman, that it is appropriate that we move as we have in the rest of the telecom policy to a Federal framework on the consumer protections, and that is something that would eliminate the patchwork of regulations and gives consumers a safety net at a Federal level of what they should expect as far as consumer protections. And then as we look at the current context of the 700 MHz and the Carterfone questions, it is important to remember where we have come over the last 10 years as we went from a duopoly in cellular communications to a very robust, vibrant, and intensely competitive marketplace as we changed the policy through auctions. Instead of having two providers, having five to seven providers in a market, having both national and regional and niche providers creating a very vibrant competitive sector. And it has led to an explosion of innovation, of investment, of build out, of opportunities for consumers to choose. But we also find ourselves at a time as we have had that explosion of competition, we are now seeing the realignment in telecommunications and the convergence but also the consolidation. As we look at where we want to be in the future, I think that we have a great opportunity in the 700 MHz to create an open platform that will make sure that we have competition and choice and innovation in the future, not only in the past but for the future. And let me be very clear on what openness is and what openness is not. Openness is not net neutrality. Openness is creating the wholesale market, it is creating interoperability for devices so that you can use a device, whether it is an iPhone or another device, with whatever function you choose. If you want to go to a WiFi or WiMAX spot and use it or if you want to have the access to other networks, you can do so. That is openness in wholesale. We have done the same thing in energy, whether it is natural gas or electricity in creating wholesale markets and the ability for independent power producers to connect to the grid, to the system, to the network. And so that is all that we are doing here, actually, the best way to ensure a non-regulatory solution and a new space and a new opportunity with the 700 MHz to have the robust competition, innovation, and investment that we have had in the past.

So I really commend Chairman Martin for taking this opportunity to address and to get a space in our spectrum that would be open, innovative, competitive. I also commend Chairman Martin for addressing the significant need for a public safety network that would drive interoperability and public safety and will for the first time since 9/11 and Katrina give us our best hope of having a national public safety network.

As we look at the Carterfone issue, it is the equivalent of portability. I think that what we did in 1996 that a consumer could choose if I am going to go with a cable company, a telephone company, or any competitor and I can take my number with me. Now the question is in the wireless sector, can you take your phone with you as you choose which network, which carrier, which device that you want to. And as we look at the challenges and the threats of maintaining competitiveness, I believe having an open space and new space where you don't have to impose regulatory burdens on any incumbent carrier but you give a new network a chance with new opportunities, I think this is the best way to go, and this is the best time and opportunity.

Mr. Chairman, I yield back.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from Texas, Mr. Gonzalez.

Mr. GONZALEZ. I will waive my opening statement.

Mr. MARKEY. The Chair recognizes the gentlelady from California, Ms. Solis.

OPENING STATEMENT OF HON. HILDA L. SOLIS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Ms. SOLIS. Thank you, Mr. Chairman, and happy birthday. And I also want to thank the ranking member, Mr. Upton, for holding this very important meeting today. I look forward to learning more about the advances in the wireless industry, which has over 200 million subscribers. Many of my constituents consider a cell phone a necessity now for their convenience and safety. According to a recent Pew Hispanic Center survey, 59 percent of all Hispanic adults in the U.S. consider the cell phone a necessity rather than a luxury compared with fewer than half of non-Hispanic whites at 46 percent and non-Hispanic blacks at 46 percent. Even more consumers are now foregoing landline phone services in favor of cell phones. We have seen an incredible rise in broadband wireless Internet usage and a release of new, innovative products in recent years such as the new BlackBerry models and the iPhone. Consumers are relying even more on wireless devices and the networks that support them to meet their communications and entertainment needs. The increasing wireless usage by all Americans will be directly impacted by the innovation of the wireless industry and consumer protection regulations. I look forward to hearing from our witnesses about the positive and negative effects of State and Federal regulations on consumer services and innovation in the industry. I am also interested in the concept of wireless net neutrality, and I hope our witnesses can tell us more about whether they think the industry is moving toward an increased portability of devices on different networks. And I yield back the balance of my time.

Mr. MARKEY. The gentlelady's time has expired. The Chair recognizes the gentleman from Illinois, Mr. Hastert.

Mr. HASTERT. I thank the chairman, and I too want to congratulate the chairman on his long, long life and great seniority on this committee. And I understand you are now third in line geriatrically on this committee, so I congratulate you.

Mr. MARKEY. Thirty-one years on this committee and I am still considered a young man still waiting for my——

Mr. HASTERT. That is a long, long time.

Mr. MARKEY. That is a long, long time.

OPENING STATEMENT OF HON. J. DENNIS HASTERT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. HASTERT. Mr. Chairman, I want to thank you for holding this hearing today, and I would like to certainly welcome the panel and look forward to hearing about the new innovations in the wireless industry.

When I got my ears wet, I guess, on this issue was back in the early 1980s when I wrote the Public Utility Act in Illinois and the Telephone Act. Back then there was twisted wire and copper wire and a little black thing that you dialed, and people picked it up and really didn't know how to use the punch buttons yet, but things have changed so much. You couldn't even begin in the 1980s to try to think about smart buildings, PCs, and handheld telephones and the things that we have today. This has happened partly because there is competition. Competition in the wireless marketplace has dramatically changed since 1993 when Congress created the classification of commercial mobile services. In the early 1990s there were only 25 million cell phone users, and now the number has grown to over 225 million according to the FCC. The number of mobile telephone subscribers have increased penetration rates of approximately 71 percent. The amount of time mobile subscribers spend talking and texting on their mobile phones has also increased. The volume of text message traffic has grown to 48.7 billion messages in the second half of 2005, nearly double the 24.7 billion messages in the same period of 2004. Revenue per minute fell 22 percent during 2005 from 9 cents in 2004 to 7 cents in 2005. These numbers speak volumes of an industry that is clearly shown to be extremely competitive and able to provide for its consumers. Wireless companies such as AT&T, Sprint, Verizon, and T-Mobile offer a menu of other services along with the traditional mobile and voice services, including text messages, data transferring, Internet and television access on their mobile devices. These various capabilities have given consumers plenty of choices.

With as many options and plans as we have to choose from today, it is certainly questionable to impose Government regulation and net neutrality mandates on an industry that is already aggressive. Government should not dictate how a current successful industry should run, and the Carterfone principles should not be extended to today's competitive wireless industry. Congress must continue to promote policies that foster innovation in wireless technologies and not allow States to set policies that will stifle competition. It is critical that we do not enact regulatory burdens that hinder an industry responsible for providing consumers choice in telephony.

I thank you, Mr. Chairman, and look forward to hearing from our witnesses today, and I yield back my time.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from Washington State, Mr. Inslee.

OPENING STATEMENT OF HON. JAY INSLEE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. INSLEE. Thank you. I look forward to this hearing. I just wanted to comment on two things that have fundamental ramifications for the development of this service, one is the development of white spaces, and we won't be talking about that much today, but I think it is an important issue that all of us keep in mind that we try to develop these technologies. The other, I want to reiterate Mr. Upton's comments about the injunction that really does threaten the industry of Broadcom and QUALCOMM issue, and I will be active in talking to the Ambassador in attempting to find a remedy that doesn't potentially significantly affect services for millions of Americans, and I look forward to working with others in this room on that. Thank you.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from California, Mr. Radanovich.

Mr. RADANOVICH. Thank you, Mr. Chairman. Happy birthday, and I pass.

Mr. MARKEY. Thank you. I appreciate it. The gentleman will receive extra time for that. The Chair recognizes the gentleman from Florida, Mr. Stearns.

Mr. STEARNS. Mr. Chairman, happy birthday several times.

Mr. MARKEY. Unlimited.

OPENING STATEMENT OF HON. CLIFF STEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. STEARNS. Obviously thank you for holding this important hearing. We welcome the witnesses. It is interesting to go through the witnesses and where they are from and so forth, so it is quite diverse, and I compliment the majority for getting, I think, a very balanced list of witnesses here.

I think of course as many on this side will say, we are interested in focusing on the consumers' welfare. It is a true American success story, this wireless industry story. It was once thought to be perhaps a niche market appealing to maybe 900,000 people maybe by the year 2000. Despite these predictions, the wireless industry has become one of the fastest-growing and most competitive sectors of the U.S. economy because Congress has more or less allowed the consumers to rule the market. Many of us obviously feel the consumers are the best judges here, and we work for them, and so we look forward to more competition.

Since Congress laid the groundwork in 1993 to create a competitive wireless industry, the number of wireless subscribers has leaped from about 16 million to 230 million people today. In addition, the wireless penetration is now more than 76 percent of total U.S. population. Competition in the wireless industry continues to grow beyond what many of us could even imagine. The FCC recently reported that 97 percent of the United States' population lives in counties with at least three service providers, up from 88 percent in 2000. That is a huge success story we all should be proud of. Consumers are also getting a great deal. In 1993 the average wireless bill was about $61.50, and consumers used their devices an average of 140 minutes per month. In 2005, the average wireless bill of $50 was nearly 20 percent less, and the average minutes of use was 708 minutes, a more than 400 percent increase.

The purpose of this hearing is to examine the relationship between wireless consumers and wireless service providers. As we have seen, the wireless industry exists in a highly competitive environment. The best protection consumers can have is a competitive marketplace. Wireless has four national competitors today. Congress needs to ensure a national framework for wireless so that one or two renegade States don't disrupt the status quo and harm wireless competition. In the event of market failure, the FCC should have the exclusive responsibility of adopting consumer protection regulations. The FCC is the most appropriate agency to do this because the wireless industry is a national service, and the Commission already licenses and regulates this industry.

So in closing, Mr. Chairman, the best consumer protection is competition, and Congress must fight the urge to impose burdensome regulation on this industry. And I thank you, Mr. Chairman. I yield back the balance of my time.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from Michigan, Mr. Dingell.

OPENING STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. DINGELL. The chairman thanks the chairman for holding this important and timely hearing on your birthday. And by the way, happy birthday.

Today, Mr. Chairman, we turn our attention to how consumers are treated by the wireless industry and what consumers may expect in the future. We also consider the wireless industry's call for greater Federal control of consumer protection measures. Important questions.

I am pleased that so many American consumers have elected to purchase wireless devices. Like many, I have come to rely on my BlackBerry, and I am now enjoying a brand new iPhone. I am pleased that the wireless industry has adopted a consumer code whereby carriers have pledged to make certain information available to consumers and to follow certain pro-consumer practices. I remain, however, concerned about some lingering consumer protection issues and how these issues will relate to the licensing of new spectrum shortly to be up for auction.

The first issue is the imposition of early termination fees on consumers who choose to terminate a wireless contract. I fully appreciate the need of carriers to recover the costs of providing consumers with new devices at low prices. Unfortunately, there are reports that this practice has been abused. In some cases, consumers have been forced to pay the fee even if their service never worked and they were not properly served. It is puzzling to me that the amount of the fee is not tied to the cost of the phone. Carriers typically charge the same fee for subscribers with the cheapest handsets as they charge for those with the most expensive handsets.

I am also concerned about the bills that consumers receive from their carriers. These are almost always difficult to understand and in some instances impossible to understand. Proper billing practices have long been a problem for all telecommunications customers, and this is a matter into which this committee must inquire I think now. The Federal Communications Commission received more than 12,000 consumer inquiries and complaints related to wireless services in 2006. Many of these concerned billing issues. This consumer protection issue clearly must be addressed and vigorously so.

Finally, I am concerned about the complaints of some small carriers that they have difficulty in obtaining roaming agreements with large, national carriers. Clearly consumers are in need of protection in this matter so that they may receive the optimum amount of choice in the service that they are afforded by the different suppliers. Technological limitations and increased consolidation sometimes leave small carriers with only one large carrier with whom they may enter into a roaming agreement. This dynamic may produce abnormally high roaming rates for customers of small carriers. It may also limit the area in which consumers may expect to be served properly.

The major wireless carriers are asking Congress to preempt the States on wireless consumer protection matters. In exchange, the carriers ask to reestablish a national set of consumer protection rules. This committee has carefully established the current regulatory framework for the wireless industry, and precluding a State from protecting its citizens is not a matter that should be undertaken lightly. Many wireless carriers, however, operate national businesses, and it is possible that consumers might gain more under a federalized regime. I look forward to the testimony on this topic, and I think it is again a matter for inquiry by this committee.

Finally, I expect to hear more about the controversy surrounding the so-called Carterfone rules and wireless networks. This issue has taken on a new urgency since USA Today reported that the FCC may apply some form of Carterfone to new licenses in the 700 MHz band. When considering these developments, we should always seek to ensure that the Commission's actions benefit consumers, because it is they to whom we have the greatest responsibility. In the past, even the FCC's most well-intentioned initiatives have not always resulted in solid consumer benefits, some even operating to the detriment of the consumer.

I look forward to learning more about the witnesses' views on this matter and also to finding out what the FCC intends to do and how it will impact upon the consumer. I welcome the distinguished panel of witnesses who appear before the committee today, and members of the panel, I express my thanks to you for your assistance and for the testimony that you will present in the hearing. I thank you, Mr. Chairman.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from Oregon, Mr. Walden.

Mr. WALDEN. Thank you, Mr. Chairman, and happy birthday, and I am going to waive my opening statement in honor of your birthday.

Mr. MARKEY. Thank you. I appreciate that. The Chair recognizes the gentleman from Michigan, Mr. Stupak.

OPENING STATEMENT OF HON. BART STUPAK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. STUPAK. Thank you, Wizard Markey, and happy birthday. I look forward to hearing the testimony of our distinguished panel today. The home page of CTIA, the wireless association, poses the question, who doesn't have a cell phone these days. It is a rhetorical question as there are 260 million wireless customers today. Innovation and competition have been the hallmarks of the wireless industry. Consumers have benefited tremendously, and the industry has grown rapidly. However, a different question in my neck of the woods is often asked, who has cell phone coverage? Unfortunately, too often in rural America consumers lack dependable, affordable cell phone service that works for them at home, at work, and everywhere in between. I know when I travel my huge district, I have long periods of time when I cannot be reached. That is not to say that the wireless industry has not made great strides in rural America; it has. It is just that rural America continues to face fewer choices and less coverage.

Today's hearing is about taking stock of the marketplace and examining whether consumers would benefit from changes to our nation's wireless policy. I look forward to a good debate on the issues on the role of State regulators in requiring open access rules on wireless. Consumers, especially those who live and work in rural America, deserve accurate coverage maps when they are choosing a plan. Rural consumers should be able to know if their coverage is going to work when they travel out of the carrier's service area. Smaller, rural, and regional wireless carriers have raised concerns about their ability to negotiate fair and reasonable roaming agreements with national carriers. The FCC first opened a proceeding on this issue in 1999 and reopened it in 2005. I look forward to hearing the panelists' thoughts on these concerns.

I would be remiss if I did not mention the upcoming auction of the 700 MHz spectrum and the Federal-State Universal Service Fund joint board's proposal for an interim cap on wireless. This committee held a hearing earlier this year on the upcoming 700 MHz auction. It was pronounced over and over, including by myself, that the spectrum is ideally suited to provide broadband to rural America. As such, I was pleased that Chairman Martin proposed strong build-out requirements for the spectrum to be auctioned. I am hopeful that the chairman and the Commission remain committed to this proposal as the rules are finalized.

Finally, I believe this committee needs to begin some real oversight and work on universal service reform. A good place to start is with wireless. The joint board recently proposed an interim cap on USF support for wireless. While I agree that the growth in wireless deserves the Commission's immediate attention, I have serious concerns with the cap proposal. Interim policies at the FCC tend to become permanent. Furthermore, the cap may freeze in place the problems with the current system and effectively stall deployment of wireless in areas of the country that are still lacking coverage.

Mr. Chairman, I am hopeful the committee will turn to these issues as you continue your series of hearings on wireless technology. Thank you, and I yield back.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentlelady from California, Mrs. Capps.

Mrs. CAPPS. Thank you, Mr. Chairman. I waive my opening remarks except to welcome the witnesses and try to figure out why we are having this hearing on your birthday or vice versa.

Mr. MARKEY. I thank the gentlelady very much. The gentleman from Texas, Mr. Green.

OPENING STATEMENT OF HON. GENE GREEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. GREEN. Thank you, Mr. Chairman, and happy birthday. When you get to be our age, we are just happy to have them, but we don't want to count them. I would like to put my opening statement into the record, but I will give you an example about how wireless has expanded so much in our country.

In 1999 I brought a very old car up here from Texas. I drove it, and there were so many places between Texas and Washington, DC that I lost cell phone service. That was prior to BlackBerries. But I brought another one up this last week, and I was amazed that driving in very rural areas all through the south, Mississippi, Alabama, Tennessee, and even in southern Virginia how the service was never a problem at all with the BlackBerry or cell with two different large carriers. So obviously from the consumer side we know that, and it is great to experience it, because coming from the very urban area in Houston and working in Washington, DC, some of us don't realize in the rural areas, like my colleague from Michigan said, that there are still gaps in it. And that is what I would hope that we would look forward to. I know the coverage nationwide is good. 98 percent of the U.S. population lives in counties with three or more wireless operators, and 51 percent of the population lives in counties with five or more wireless operators. So Mr. Chairman, I would like to again place the whole statement in the record, but thank you for holding the hearing, even if it is on your birthday, but it is also Wednesday.

Mr. MARKEY. Thank you, Mr. Green, very much. And the gentlelady from California, Ms. Harman.

OPENING STATEMENT OF HON. JANE HARMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Ms. HARMAN. Thank you, Mr. Chairman. On behalf of California grandmothers, I join with Mrs. Capps in wishing you a happy birthday.

To our witnesses and to the committee, I realize that the scope of this hearing goes beyond just spectrum, but the biggest spectrum in U.S. history is on the horizon. After the DTV transition, the importance of the consumer issues under consideration today will grow exponentially. I am confident that the wireless industry, including the companies represented by our witnesses today, is doing its best to offer cutting-edge services at competitive rates, but the upcoming 700 MHz auction, the iPhone, and the QUALCOMM/Broadcom patent dispute all show how quickly the wireless industry is changing. On the open access question, greater freedom for wireless devices and applications can bring down the cost of handsets and spur innovation in the industry. We should look hard at this idea as the FCC is because wireless technology in the U.S. is years behind other parts of the world.

But my priority, Mr. Chairman, and I think everyone on the committee is getting a little tired of this rant, is to assure that we don't blow it with respect to the 700 MHz auction for the public safety spectrum. Mr. Pickering and I wrote again yesterday, and I am sure he mentioned this, to the FCC urging that the auction include open access, wholesaling, and a national not regional approach. I believe he did speak to this earlier. I hope the FCC is listening.

On television yesterday, and actually in the press today, is information from the Department of Homeland Security Secretary Michael Chertoff and others that chatter is up and an attack on U.S. soil by some terror group or terror groups or terror cells is likely this summer. This is mid-July, so we have 6 anxious weeks to go. I worry that when it comes, I didn't say if it comes, we still may lack the interoperable communications so necessary for first responders to respond adequately, especially if there are near-simultaneous attacks in different parts of the country, which is absolutely possible. This problem has to be fixed. This problem won't be fixed if we do business as usual. The clock is ticking. I am glad that the FCC is acting promptly, but it is now necessary for the FCC to make the right decisions; and I would urge this committee, I would urge you, Mr. Chairman, and I would certainly urge others listening in to get this right with respect to open access, wholesaling, and a national approach to this emergency spectrum. I yield back the balance of my time.

Mr. MARKEY. The gentlelady's time has expired. The gentlelady from Tennessee, Mrs. Blackburn, is not a member of the subcommittee, but by unanimous consent, we would invite her to make an opening statement if she would like.

Mrs. BLACKBURN. Thank you, Mr. Chairman. I will waive. I look forward to the witnesses and opportunity for questions.

Mr. MARKEY. OK

Mrs. BLACKBURN. I yield back.

Mr. MARKEY. The gentlelady's opportunity will be preserved, and I do not see any other members of the subcommittee wishing to be recognized for the purpose of making any opening statements. We will turn to our very distinguished panel and will begin by recognizing Commissioner Tony Clark. Mr. Clark is commissioner of the North Dakota Public Service Commission. He also serves as the president of the Telecommunications Committee of the National Association of Regulatory Utility Commissioners. Welcome, Mr. Clark. You have 5 minutes to deliver your testimony.

STATEMENT OF TONY CLARK, COMMISSIONER, NORTH DAKOTA PUBLIC SERVICE COMMISSION, BISMARCK, ND

Mr. CLARK. Thank you, Mr. Chairman, and Ranking Member Upton and members of the subcommittee. I appreciate the opportunity to testify today. I am Tony Clark, commissioner with the North Dakota Public Service Commission and a member of the National Association of Regulatory Utility Commissioners and chairman of its Telecommunications Committee. We commend you for holding this hearing on protecting consumers, and it is a goal that is shared by both the States and Congress.

Under current law, State commissions handle thousands of consumer complaints every year and generally provide individual relief to each complaint, often resolving complaints in a matter of weeks or even days through informal processes. In addition, we are able to address new and novel concerns as they arise.

We are concerned because the wireless industry in particular has lobbied to create a technology-specific preemption standard for their telecommunications service. As a response to concerns that we have raised with regard to this approach, industry representatives have said that they still support State attorneys general having authority to enforce general laws of applicability over the industry. We respectfully argue that this sounds a whole lot more impressive than it actually is; and in fact, 41 State attorneys general as well as NGA agree with us, signing a letter to Congress last year urging a defeat of the kind of preemption that we are discussing.

The point is that while fraud enforcement actions have their place in jurisprudence, it is a pitifully poor way to police a market like telecommunications. Take, for example, the issue of bill slamming and cramming. Now, it is clearly a wrong practice, and laws prohibiting it on the State level are clearly telecom specific. And yet Federal legislation that would only permit State laws of general applicability in the wireless arena would wipe these laws from the books of 50 States as they pertain to the wireless providers. Is this really good public policy? Do we want to have to bring a full fraud case for every wireless bill dispute that arises, while handling wireline landline complaints through an administrative process? It makes no sense and illustrates the problem with broad Federal preemption based on a specific technology.

In addition, we believe that a law change at this juncture would add significant legal confusion over a Federal act that is only now beginning to see some legal stability after years of litigation.

In November 2004, NARUC convened a Task Force to examine our own role and our view of the telecommunications marketplace and federalism. The outcome of that and other NARUC efforts we believe sets NARUC on a very pragmatic, moderate path in dealing with the wireless jurisdictional relationship; and while we do not believe that limiting States to laws of general applicability is a feasible path forward, neither do we argue for a return to rallying around old jurisdictional flags and crying States rights. Instead, we believe we offer a constructive way of viewing the Federal-State wireless relationship. In the end, we came to two important conclusions.

First of all, with the pace of innovation, all Government policies must strive to be as technologically neutral as possible. And the second conclusion was the development of our functional federalism concept, which is the idea that if Congress is going to write portions of the Telecom Act, it doesn't have to be bound by traditional distinctions of interstate versus intrastate or try to figure out ways to isolate the intrastate component of each service. Instead, a Federal framework should look to the core competencies of each level of government and decide what it wants to regulate and then just decide who does what best. Now, some have argued for the FCC to set national standards for consumer protection. NARUC is very willing to explore Federal standards for consumer protection, and we believe that it may be one way to address carrier concerns over potentially conflicting State regulations. However, we also wish to be clear that Federal standards must be accompanied by a State enforcement mechanism. Experience has taught us that relying solely on the Federal Government for enforcement of a mass market like this would be folly. Take for example, the Do Not Call list experience. While both States and the Federal Government have enacted these laws, in practice, enforcement has fallen overwhelmingly to the States, in fact, almost exclusively.

Finally, we believe that States must retain the ability to enact new consumer protections to then address potential abuses. To limit the ability of States to address emerging concerns will in effect handcuff cops on the beat protecting consumers.

The bottom line is that State regulators are seeking a middle ground that relies on each level of government doing what it does best: the Federal Government setting standards that apply to all and the States enforcing those rules and tailoring them to emerging specific issues. It is a partnership, not preemption. If the industry finds State rules burdensome and contradictory, we believe appropriate remedies should rest with the FCC conducting individual case-by-case reviews of the disputed rules.

Finally, Mr. Chairman, I would note that NARUC has committed itself to ongoing dialog with the industry and other policy makers to ensure that the benefits of wireless innovation are preserved while ensuring that consumers are served in the best possible way.

Again, I thank you for the opportunity to testify. I look forward to any questions you may have.

[The prepared statement of Mr. Clark follows:]

Testimony of the Honorable Tony Clark
Commissioner, North Dakota Public Service Commission

on behalf of the

National Association of Regulatory Utility Commissioners (NARUC)

before the

Committee on Energy and Commerce
Subcommittee on Telecommunications and the Internet
of the
United States House of Representatives

Hearing on Wireless Innovation and Consumer Protection

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Introduction

Chairman Markey, Ranking Member Upton and members of the Subcommittee, thank you for the opportunity to testify today regarding *Wireless Innovation and Consumer Protection.*

I am Tony Clark, commissioner with the North Dakota Public Service Commission and a member of the National Association of Regulatory Utility Commissioners (NARUC). I serve as chairman of NARUC's Committee on Telecommunications. NARUC represents State utility commissioners in all 50 States and US territories, with oversight over telecommunications, energy, water and other utilities.

Some State commissioners, like me, stand for election as each of you do. Others are appointed by our governors. *But every single State Commissioner, as a leader in each of your States, is, like you, ultimately accountable to the voters.* Your State commissioners share your commitment to assuring that each of your constituents receives the benefits of broadband convergence, new wireless technologies and intense competition. In almost all cases, the Commissioners on your State commission will have an intense and almost complete identity of interest with you on policy goals for your respective States. Many of you know your State commissioners and all of us have worked hard, not just at our day jobs, but to be honest brokers on how national policies impact each of our States. I know it is hard to sort through all these questions, but I would humbly suggest that partnership with the States is key, and I would urge you when considering any new legislation to keep that partnership in mind.

We commend you and the committee for holding this hearing on protecting consumers – a goal and responsibility States share with Congress. We particularly appreciate your setting aside time to hear from your "beyond the Beltway" colleagues.

Wireless communications is a rapidly growing and technologically evolving market. Mobility along with improved call quality and new functions offered by wireless carriers make this service attractive to consumers and is leading many to "cut the land-line cord." The increasing consumer reliance solely on wireless is a testament to improvements in their service over the years. However, increased consumer reliance solely upon wireless also brings a higher level of consumer expectation and scrutiny. Data issued by entities as diverse as State Attorneys General and the Better Business Bureau indicate that complaints about wireless telephone service and supplies are amongst the top complaints received within recent years.

While we note that there has been improvement in recent years, we also note that this improvement has been the result of both market forces and regulatory initiatives, such as number portability and the industry's voluntary code of conduct, developed at the behest of groups like NARUC. In any event, we would stress that market forces in even the most competitive market cannot eliminate bad actors, anticompetitive practices, or public safety concerns that may need continued policing.

Under current law, State commissions handle thousands of consumer complaints every year, and generally provide individual relief to each complaint, often resolving complaints in a matter of weeks or even days through informal processes. In addition, we are able to address new and novel concerns as they arise.

We are concerned because the wireless industry in particular has lobbied to create a technology-specific preemption standard for their telecommunications services. Indeed, the overwhelming majority of States have already, by legislative fiat or State commission action, eliminated all traditional regulatory oversight of the wireless industry. In many of those states, however, the Commission and Attorneys General still play a role in resolving consumer complaints. And in those States and others, the very fact that the State retains jurisdiction, even when unexercised, acts as a deterrent for consumer abuse and an incentive to cooperate with informal complaint resolution procedures.

As a response to this concern that we have raised, industry representatives have said that they still support State Attorneys General having authority to enforce general laws of applicability over the industry. We respectfully argue that this sounds a whole lot more impressive than it actually is. In fact, 41 State Attorneys General agreed, signing a letter to Congress last year that urged a defeat of the kind of preemption legislation proposed last year.

While fraud enforcement actions have their place in jurisprudence, it is a pitifully poor way to police a market like telecommunications. Just take, for example, the issue of bill slamming and cramming. It is clearly wrong and laws prohibiting it are clearly telecom specific. And yet federal legislation that would only permit State laws of general applicability in the wireless arena would wipe these laws from the books of 50 States as they pertain the wireless providers. Is this really good public policy? Do we want to have to bring a full fraud case for every wireless bill dispute that arises, while handling wireline slamming and cramming complaints administratively? It makes no sense and illustrates the problem with broad federal preemption based on a specific technology.

From NARUC's perspective, it makes little sense to eliminate avenues of consumer relief at the State level solely on the basis of the particular technology used. In the case of wireless, it makes even less sense because the industry has prospered so well under the division of authority that now exists. And while some have argued that wireless is "too interstate" to face telecom-based State consumer protections, our experience is that the carriers have little trouble finding their way to Boston or Lansing or Sacramento when they are asking for something, such as certification to receive universal service dollars or interconnection to the wireline networks.

Finally, we believe that a law change at this juncture would add significant legal confusion over a federal act that is only now beginning to see some legal stability after years of litigation. For example, how would a wireless-specific State preemption impact how States enforce Eligible Telecommunications Carrier obligations? How would it address State commission oversight and administration of duties related to section 251 interconnection or universal service? No one knows, but there would surely be legal wrangling to define it as soon as new legislation is passed. And the money spent on litigation is money that will not be spent on consumer services, or new products and innovation. Considering the lack of any substantial, demonstrated problem that is trying to be fixed, we can see little reason for a legislative change.

Partnership...Not Preemption

In November 2004, NARUC convened a Task Force to examine our own role and our view of the future of federalism and telecommunications. After internal polling, extensive discussions and consultation with consumers and industry stakeholders, NARUC ultimately adopted a whitepaper on Federalism in 2005. The document, combined with a more recently released wireless whitepaper, we believe sets NARUC on a very pragmatic, moderate path in dealing with the wireless jurisdictional relationship. While we do not believe limiting States to laws of general applicability is a feasible path forward, neither do we argue for a return to rallying around old jurisdictional flags and crying "States rights." Instead, we believe we offer a constructive way of viewing the federal-State wireless relationship. In the end, we came to two important conclusions.

The first was that, with the pace of innovation accelerating, all government policies must strive to be as technology neutral as possible. Whenever technological change and restructuring sweeps through an industry, there is pressure to give new technologies special status under the law because they don't appear to fit the "old" regulations. The problem with this approach is that the new services compete directly with traditional services, and by creating brand new regulatory silos, you distort the market, encouraging regulatory arbitrage instead of true innovation. The better approach, in our view, is to ask how these new technologies change the environment for *all* players, and reexamine the first principles behind the regulations that are on the books for everyone.

The second conclusion was the development of our "functional federalism" concept, which is the idea that if Congress is going to rewrite the Telecommunications Act, it doesn't have to be bound by traditional distinctions of "interstate" and "intrastate," or figure out a way to isolate the intrastate components of each service. Instead, a federal framework should look to the core competencies of agencies at each level of government – State, federal and local – and allow for regulatory functions on the basis of who is properly situated to perform each function most effectively.

In that model, States generally excel at responsive consumer protection, efficiently resolving intercarrier disputes, ensuring public safety, assessing the level of competition in local markets and tailoring national universal service and other goals to the fact-specific circumstances of each State. In essence, a functional federalism approach assures there are multiple cops on the beat.

Some argue for the Federal Communications Commission to set national standards for consumer protection. NARUC is very willing to explore federal standards for consumer protection, and we believe this may be one way to address carrier concerns over potentially conflicting State regulations. After all, State regulators also want to ensure that compliance costs are minimized so that investment dollars can be focused on providing new service to consumers. However, we also want to be clear that federal standards must be accompanied by State enforcement. Experience has taught us that relying solely on the federal government for enforcement of a mass market like this would be folly. Take for example, the Do Not Call List experience. While both States and the federal government have enacted these laws, in practice, enforcement has fallen overwhelmingly to States, in fact, almost exclusively.

For illustrative purposes, consider this: North Dakota is a state of only about 640,000 people. In the first 2 ½ years of its strict state do-not-call law, the state Attorney General has enforced 53 settlements, totaling over $64,000, and issued 7 cease and desist orders just in his state alone. Meanwhile, the entire federal government, despite receiving over one million complaints, has only issued 6 fines and filed 14 lawsuits. Even more importantly from the consumer's viewpoint, telemarketers were quick to exploit a patchwork of loopholes and "workarounds" to the federal rules and the calls kept coming. It fell to a handful of States to say that "no means no". It is not that federal officials don't care, it is just that there is simply no way they could effectively respond to individual complaints across a nation this large unless States are full partners in enforcement.

Finally, we believe that States must retain the ability to enact new consumer protections to address potential abuses. To limit the ability of States to address emerging concerns will in effect "handcuff" cops on the beat protecting consumers.

Due to their role as protectors of the consumer, State utility commissions are usually the first to learn of and act on new and novel consumer concerns. For example, States were the first to address the issues of cramming, slamming and other scams. At least 21 States had instituted Do-Not-Call lists before the federal Do-Not-Call registry was enacted. This ability to respond quickly to new issues is a key strength of State commissions. The federal government should not tie the hands of States by impeding their ability to act in the best interest of their residents. To do so would be a disservice to hard working, law-abiding citizens while leaving the door open for potential bad actors.

The bottom line is that State regulators are seeking a middle ground that relies on each level of government doing what it does best: the federal government setting standards that apply to all and the States enforcing those rules and tailoring them to specific emerging issues. It is a partnership, not preemption.

Case-by-Case Review of State Rules above Federal Floor

If federal policymakers or the wireless industry are concerned that preserving the current authority of States, under which the wireless industry has flourished, may result in onerous or discriminatory States laws, we believe this issue can be easily addressed. The FCC has procedures in place that can be applied to address industry concerns. In the case of CPNI-consumer privacy and slamming issues, the FCC has established a process under which a carrier may petition the FCC to challenge State regulations above the federal floor it feels are overly onerous or conflict with federal rules. This system has worked very well and balances the needs of industry while maintaining appropriate consumer protections.

Conclusion

The wireless industry is rapidly growing and quickly replacing traditional land-line phone service in many people's lives. This is positive in that wireless service is one that consumers want and it brings robust new technologies to the marketplace that can improve quality of life, economic development and public safety. It is also clear that consumers must continue to have avenues available that allow for timely and effective resolution of complaints and more often than not State commissions are where they turn for resolution.

State commissions are effective protectors of consumer interests and serve as a valuable complement to federal rules and action. The "functional federalism" model endorsed by NARUC ensures multiple "cops on the beat" and is a win-win for consumers.

In summation let me reiterate the four key points that NARUC urges the Committee include in any legislation addressing wireless consumer issues:

5) Rules must be technology neutral and ensure a level, competitive playing field regardless of technology

6) Functional federalism – any federal framework should look to the core competencies of agencies at each level of government and allow for regulatory functions on that basis, in effect putting multiple cops on the beat to protect consumers, in this case the principle dictates that national rules must allow for state enforcement of those rules
7) Federal rules must allow States to address emerging consumer threats - Limiting State action would "handcuff" cops protecting consumers
8) Case-by-case review of State rules – Carriers should be allowed to petition the FCC to challenge perceived onerous State rules above the federal floor on a case by case basis – balances needs of industry while maintaining appropriate consumer protections

Finally, Mr. Chairman, I would note that NARUC has committed itself to ongoing dialogue with the industry and other policy makers to ensure that the benefits of wireless innovation are preserved, while ensuring that consumers are served in the best possible way.

Chairman Markey, Ranking Member Upton, and members of the Committee, I thank you for the opportunity to testify before you today. NARUC looks forward to working with you to ensure our common goal of effectual consumer protection.

I look forward to answering any questions you may have.

Mr. MARKEY. Thank you, Mr. Clark, very much. Our next witness is Mr. Steven Zipperstein. He is the vice president and general counsel of Verizon Wireless. Welcome, sir.

STATEMENT OF STEVEN E. ZIPPERSTEIN, GENERAL COUNSEL, VERIZON WIRELESS, WASHINGTON, DC

Mr. ZIPPERSTEIN. Good morning, Mr. Chairman. Thank you very much, and happy birthday. Mr. Chairman, Ranking Member Upton, and other members of the subcommittee, it is a pleasure and a privilege to be here with you today to talk about the issues that have been raised in the opening statements and other issues that I am sure will come up in the hearing, and I will do my best to answer all of your questions as forthrightly and as candidly as I possibly can.

A number of the members have referred to the recent developments particularly yesterday and this morning in the press regarding the upcoming spectrum auction, and I thought I would begin by offering a few comments from the perspective of Verizon Wireless on these developments.

First, so far all we have, I think it is important to emphasize is a proposal. Mr. Chairman, you refer to the fact that the chairman of the FCC is poised to take action but that no final action has occurred; and I just want to make the point that we have a proposal. We haven't even seen the language yet. It hasn't been released publicly. All we can do is speculate at this point about what the specifics are, and of course, the process at the FCC will continue over the next few weeks as people discuss the proposal with the FCC that will lead eventually to final rules.

I think it is also important to note that based on what we have seen emerge in the press last night and this morning, it appears that the proposal may be somewhat narrower in scope than originally appeared to be the case yesterday morning. For example, it now appears based on what we are reading and hearing that the proposal affects about one-third of the spectrum to be auctioned, about 22 MHz or so out of the 60 MHz to be auctioned, and it appears that the so-called open access component that would apply to that one-third or so of the spectrum appears to be focused on a couple of issues. The first issue involves what some of the members have referred to here this morning as device portability, namely allowing consumers to bring devices of their choosing onto a carrier's network, and second, it appears that there may be some focus on enabling so-called WiFi access, and I wanted to talk about both of those two for a moment if I may.

With regard to device portability, the first thing I wanted to mention, Mr. Chairman, is Verizon Wireless has over 60 million customers. Every day we receive thousands of phone calls into our centers from those customers who have questions about various items. We receive e-mails at our headquarters, we receive letters from customers with complaints, with suggestions, with ideas. We have, quite frankly Mr. Chairman, not heard from our customers very much about a desire to bring other devices onto our network or a desire to enable WiFi. We just have not been hearing that from our customers. We understand it is a concern. I don't want to in any way downplay the concern, I just wanted to report to the subcommittee that it is not something that we are seeing a lot of from our customers. It is also important to remember that the FCC initially, under Chairman Hundt, and then continuing through the present, set the wireless industry in this country on the path to developing dual technologies that would compete against each other, CDMA technology which my company uses, which Sprint uses, which Alltel uses is one path. The other path is the GSM technology which T-Mobile uses and AT&T uses. And those two technologies are not easily compatible with each other in a device sense. What we have been hearing from customers of ours, for example, is that when they go to Europe or to countries that have GSM, they would like a device that works over in Europe, and if I could just show the committee, we do have a BlackBerry that we began selling recently, the 8830, which works in Europe on the GSM mode and works here in this country on our network on the CDMA mode.

So as the market informs us of their desire for those sorts of devices, of course, we've responded to the market as have other carriers.

I would also then, turning to WiFi, mention that the market is responding there as well. T-Mobile as recently as last week announced a phone that will work on their network as well as WiFi. We are also looking at such a device, but I would caution that there are a lot of very, very important technical issues here. Our engineers tell me that, for example, a device working on WiFi has to search, it has to use power to get on the WiFi network, and battery life could be a real issue, and consumers could see some degradation in battery performance. And as a result, I would just echo what Chairman Dingell said and what the FTC, Federal Trade Commission, staff said recently. It is important before we plunge headlong into this that we do take a very, very careful look to make sure that we don't inadvertently do things that can be counterproductive for consumers.

I think it is also worth mentioning that the market has been able to respond to conditions such as new innovations in the iPhone in a way that has been very, very favorable to consumers. The example I would use, Mr. Chairman, is the RAZR. Cingular introduced the RAZR phone, which was the hot device at the time, November 1, 2004. It was exclusive to Cingular, GSM only, and it was $500. But ultimately the market demanded a RAZR that could work on CDMA networks, too. They are now ubiquitously available as cheap as $49.99. Some carriers even give them away for free. We didn't need Government to tell us to do that, we didn't need open access to tell us to do that, the market took care of it as other members have indicated.

Finally, Mr. Chairman, I had mentioned that there was an auction last year of 4G spectrum, the so-called AWS auction. We didn't hear calls at that time for open access in that auction. It was an extremely successful auction. $14.5 billion came into the Treasury, new entrants, cable company joint venture bought spectrum, and I am sure that if there is a business plan for open access as the ranking member said, a new entrant or an entrepreneur would certainly embrace such a plan. Thank you, Mr. Chairman.

[The prepared statement of Mr. Zipperstein follows:]

Testimony of Steven E. Zipperstein
Vice President, Legal and External Affairs and General Counsel
Verizon Wireless

COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON TELECOMMUNICATIONS AND THE INTERNET
U.S. HOUSE OF REPRESENTATIVES

Wireless Innovation and Consumer Protection

July 11, 2007

Good morning Chairman Markey, Ranking Member Upton and Members of the Subcommittee. It is a privilege to be with you this morning to discuss "Wireless Innovation and Consumer Protection." Thank you for affording me this opportunity to share with you the views of Verizon Wireless on these important topics.

Summary

In 1993, this Subcommittee and the full Congress had the forethought to establish a deregulatory framework for the wireless industry. This limited regulatory approach led to explosive growth in innovation, competition, and investment in wireless networks, providing huge benefits to the national economy. Carriers are constantly expanding services and benefits to customers because they know they must fight fiercely to attract and retain those customers.

Today, however, there are two threats to this national success story of innovation and competition.

First, my company is concerned about renewed efforts at the state level to regulate wireless service as a public utility. State utility-style regulation is both unnecessary and harmful: unnecessary because the competitive market is already driving the prices, value and services consumers want; harmful because it discourages innovation and competition.

Verizon Wireless believes the answer to patchwork, utility-type regulation is for Congress to complete the job it started 14 years ago, and adopt a national framework for wireless oversight. That framework would establish a set of comprehensive, national consumer protection standards for the industry. State PUCs would no longer have authority to impose utility-style regulation on a competitive industry that is nothing like a utility. But the states would retain all of their power through their Attorneys General to protect against unfair and deceptive consumer practices if and when they determine such practices exist, under their generally applicable consumer protection statutes.

Second, we are equally concerned by the effort in Washington by advocates of so-called "open access" regulation to have the FCC regulate wireless broadband.

Such regulation is unwarranted. Indeed, it is entirely unclear what harm must be remedied. We believe such regulation would discourage, and likely harm, innovation and decrease the utility of the wireless networks themselves on which literally hundreds of millions of people depend. As applied to the wireless industry, we believe the quest for open access or, as some refer to it -- network neutrality -- is a solution in search of a problem that simply does not exist.

Wireless Innovation and Consumer Protection

The 1993 amendments Congress made to the Communications Act placed the wireless industry on a path toward innovation, expanded service, and competition that has well served consumers and the American economy. The industry has gone from serving just 11 million customers at the beginning of 1993 to more than 233 million Americans at the end of 2006. An economic study conducted by Ovum, a research firm, indicates approximately 3.6 million U.S. jobs were directly or indirectly dependent on the U.S. wireless industry, and that an additional 2-3 million jobs will be created in the next 10 years. The same study shows the wireless industry generated $118 billion in revenues in 2004 and contributed $92 billion to the U.S. Gross Domestic Product. Ovum estimated that, over the next 10 years, the U.S. wireless industry will generate gains of more than $600 billion from the use of wireless data services, and will add another $450 billion to the GDP.[1]

Wireless companies compete against each other every day to win new - and each other's -- customers. Wireless customers have benefited enormously from this competition. The FCC recently reported that 97% of the U.S. population live in counties with at least three service providers, up from 88% in 2000,[2] and an average of nearly four carriers provide service in rural U.S. counties. [3] To secure and retain customers, carriers know they must invest in networks. Thus by the end of 2006, carriers had invested more than $223 billion - excluding the cost of spectrum - in building networks to deliver an increasing array of wireless services to consumers. [4]

Innovation is obvious not only in the hundreds of new devices, features and applications that consumers can obtain every year, but also in the deployment of new technologies that allow them to send and receive data at faster speeds. Verizon Wireless, for example, has invested billions of dollars to make not one but two major network upgrades in the past three years. First, the company spent $1 billion in just two years (2004 and 2005) to implement EvDO Revision 0, which offered customers download speeds typically at 400-700 mbps. This was in addition to significant network investment, which has averaged $5 billion each year since 2000.

[1] *Entner, Roger and David Lewin, "The Impact of the US Wireless Telecom Industry on the US Economy," Ovum-Indepen, September 2005, p. 3.*
[2] FCC, "Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Service: Eleventh Report," ¶ 2, FCC 06-142 (Sept. 29, 2006).
[3] Id., ¶ 86.
[4] *CTIA's Wireless Industry Indices, Semi-Annual Data Survey Results: A Comprehensive Report from CTIA Analyzing the U.S. Wireless Industry, Year-End 2006 Results*, released May 2007, at pages 7, 156.

Just as the investment in Rev 0 was finished, we again upgraded our network to EV-DO Revision A, which further increases download speeds and also provides our customers the ability to upload files eight to nine times faster than before. With "Rev A", customers can expect average download speeds of 600 kilobits to 1.4 megabits per second and average upload speeds of 500-800 mbps. This translates to being able to download a 1 Megabyte e-mail attachment – the equivalent of a small PowerPoint presentation or a large PDF file – in about eight seconds and upload the same-sized file in less than 13 seconds, not only while sitting at a desk. Our network allows downloads at these speeds while consumers are in a cab, on a train, or walking down the street, completely free of a desk.

Consumers are constantly benefiting from carriers' drive to differentiate themselves and to win customers. One way in which Verizon Wireless has differentiated itself has been our history of strong consumer and privacy protection. For example:

- In 2003, Verizon Wireless was the first carrier to support Local Number Portability, allowing wireless customers to switch carriers while keeping their phone number.

- In 2004, we announced that we would help protect customer privacy by refusing to participate in a national wireless phone directory, effectively halting this project.

- In 2005, in a first of its kind lawsuit, we began prosecuting pretexters who were trying to illegally obtain and sell confidential customer telephone records.

- Beginning in 2005, we obtained injunctions against spammers who sent text message solicitations to Verizon Wireless customers. Just last month, we filed a lawsuit against several telemarketing companies and individuals who used pre-recorded messages in Spanish as well as techniques and technology to mask the origin of the call, known as "spoofing."

- In 2006, Verizon Wireless became the first major wireless carrier to offer subscribers a pro-rated Early Termination Fee; a feature that many consumer groups have argued should be mandatory.

- This year, Verizon Wireless rolled out its "test drive" program which allows new subscribers to use our service for 30 days, and if they are not satisfied, to take their line to another wireless carrier during the first 30 days. We will then issue a credit for all the calls the customer made, along with the customer's monthly access and activation fees. Verizon Wireless stands behind its claims of network reliability, even to the extent of refunding charges for any dissatisfied customer's use of that network during the "test drive" period.

In part due to these efforts, consumer complaints to federal and state regulators are few. During each month in 2006, the rate for complaints from our customers to the FCC, state PUCs, or state Attorneys General was 11 out of every 1 million customers – a rate of 0.00001%.

Many other wireless carriers have also taken similar pro-consumer actions, including adhering to CTIA's Consumer Code, which sets forth detailed practices that carriers must follow in marketing their services and in billing customers.

As these examples illustrate, the marketplace, not government intervention, has addressed concerns about wireless carriers listening to consumers and providing benefits and features that consumers want.

The Need for Congress to Adopt a New National Regulatory Framework

Despite the fact that wireless services are robustly competitive, as well as increasingly nationwide in nature, and allow customers to obtain the same prices and services across state boundaries, some states continue to attempt to assert monopoly utility-type regulation over the wireless industry. Ironically, at the same time the industry has been deploying national networks and offering national rate plans that offer unparalleled benefits for consumers, a number of states threaten to undermine these benefits by imposing a patchwork of burdensome and inconsistent rules. Left unchecked, these re-regulatory efforts will force wireless carriers to follow different rules in different states and undo the benefits of deregulation – a result antithetical to Congress' goal in 1993.

In 2005 alone, 18 states attempted to impose their own regulatory regimes on our industry. Below are several examples:

- Minnesota sought to regulate wireless prices through a detailed set of requirements for contracts. While the 8th Circuit struck down the law, the industry had to fight this attempt to impose utility-type regulation for two years.

- The California PUC has proposed rules that would intensively regulate the languages in which wireless carriers communicate with their customers. Aside from the serious First Amendment problems that afflict these proposed rules and the burdens they would impose, the rules would threaten carriers' ability to serve customers for whom English is not the preferred language.

- New Mexico bars wireless carriers from including charges for "non-communications services" on a customer's bill even if the customer wants the service. California, in contrast, not only allows such charges, but also requires them to be contained in a separate bill section. A carrier operating in these two western states must not only have different bill formats, but may not be able to offer a service in one state that it can offer in the other.

The wireless industry long ago shed any vestige of monopoly, on which PUC-imposed regulation was based. We are an intensely competitive, 21st Century consumer electronics business, far more like Apple and Dell and other high-tech businesses than we are like the telephone companies of 20 years ago. Yet state PUCs do not regulate those companies. So why should they regulate us, as if we were a 20th Century wireline telephone monopoly? We are not asking for special treatment, only the same treatment accorded other competitive businesses.

Congress can simultaneously recognize the benefits of competition and prevent the harmful impacts of state-by-state regulation of a national industry by completing the deregulation it began in 1993. The federal government is in the best position to oversee this national industry, which serves the public across and without regard to state lines.

What Should Congress Do? Verizon Wireless urges the Committee to amend Section 332 of the Communications Act to eliminate state regulation of wireless terms and conditions. This is the approach the Senate Commerce, Science and Transportation Committee took in the legislation it adopted by a 15-7 bipartisan vote last year. Section 1006 of the Senate substitute for H.R. 5252 set forth a national framework that would fully protect consumers while not discouraging the innovation and carrier differentiation that have been the hallmarks of wireless service. We believe that consumer benefits, consumer protection and privacy will increase through imposition of a national framework for wireless regulation.

National regulation serves the public interest because:

- It benefits all consumers in all states by setting uniform protection and service quality standards for wireless consumers. Individual state-by-state regulation cannot do that.

- It avoids disparate state requirements that raise operational costs and cause uncertainties for companies; create confusion and inconvenience for consumers; delay new services or options that consumers would otherwise enjoy; and discourage investment in new wireless jobs and technology.

As part of this new national framework, we would support an FCC rulemaking to set consumer protection rules. These could include, for example, rules governing clear and conspicuous point of sale disclosures of charges and fees; representation of coverage and service areas, disclosures governing cancellation of wireless services; and advertising products, coverage and services.

A national framework is important for national carriers, but perhaps even more so for smaller regional and even local carriers. These companies can extend their own defined network footprint to virtual national reach by negotiating roaming agreements with one or more larger carriers, bringing value to their customers in terms of affordable national reach.

One model for a national set of rules should be the agreement that 32 state Attorneys General entered into in 2004 with Cingular, Sprint and Verizon Wireless, in which these carriers agreed to follow specific practices for conducting heir business in all those states, known as the Assurance of Voluntary Compliance (AVC). The AVC sets detailed requirements, enforceable by the Attorneys General, for advertising, information that carriers must disclose at he point of sale, coverage maps, grace periods during which customers can cancel service without penalty, and formats for customer bills.

States would not lose power to address unfair and deceptive practices. Under the national framework, states would continue to enforce their consumer protection statutes of general applicability, but would not be able impose state specific wireless regulations. State Attorneys General would thereby lose none of their authority to go after practices that they believe are unfair or deceptive. Our CEO made this point in a letter last year to Senator Lautenberg, which is attached to my testimony. States may also adopt consumer education programs, refer complaints to carriers for resolution, bring formal complaints to the FCC against carriers they believe are acting unlawfully, investigate wireless practices, and of course participate in the FCC's national consumer protection rulemaking. This new framework will maximize protections to consumers while avoiding the harms of patchwork state-by-states regulation.

The national framework would not grant any wireless carrier something different from other businesses. Instead, it would harmonize regulation. And, it would otherwise rely on market forces – consumers deciding which providers deserve their business and which do not – to compel providers to excel more effectively than patchwork state PUC regulation, and to drive providers to be more innovative and accountable.

Innovation and Open Access

Congress and the FCC have been barraged with requests that they regulate broadband wireless services by imposing so-called "open access" requirements. But we believe these requests have not identified how the wireless market has failed consumers. To the contrary, as I explained above, consumers and the national economy have reaped enormous benefits from the wireless industry's investments and innovations since 1993. We therefore agree with the Federal Trade Commission's report last month urging the exercise of "caution, caution, caution" before policymakers mandate so-called net neutrality or open access.

The one-size-fits-all mentality that characterizes open access regimes for the wireless industry would begin the process of stifling innovation and creativity in our industry. Consumer choice would be the casualty of policies that mandate that all companies do the same thing the same way. Differentiation has been a key driver for consumer acceptance of wireless product and service offerings. Indeed, manufacturers of wireless equipment and devices thrive on competing to invent the next best device. New players are entering the market. Carriers, large and small, have their own unique marketing strategies -- some focus on devices, others focus on network quality, and some compete on price alone.

Verizon Wireless supports the ability of consumers using our broadband data network to surf the net freely using our network. We also assist customers who want to bring their own devices on to our network. We simply ask that they work with us to insure their device does not degrade or interfere with the experience of the more than 60 million other users who depend on the reliability of our network every day.

There have been attempts to justify open-access regulation by pointing to a few examples of wireless products and services that are viewed as somehow not "open" enough. For example, Columbia Law School Professor Timothy Wu claimed that Verizon Wireless blocks phones that are not sold by Verizon itself.[5] That is incorrect. While we extensively test and approve phones that will operate on our network, consumers can and do buy these phones from third-party sources, not only directly from Verizon Wireless. Moreover, the limits we place on devices and applications that operate on our network are designed to manage network resources, protect against harm to the network and other subscribers, and increase spectrum efficiency, which Professor Wu acknowledges are legitimate practices for wireless network operators.[6]

Professor Wu also claims that Verizon Wireless is somehow blocking innovation in consumer applications because we "cripple" Bluetooth features of our phones, and that subscribers sued us because of it.[7] Contrary to the notion of "crippling" functionality, Verizon Wireless experts work to determine which functions to enable on the handsets we offer our customers. While a handset manufacturer may provide a device with myrid potential features, out technology and network teams work to ensure security and quality of the function we decide to enable on those handsets. In fact Bluetooth functionality is available on many of the handset we offer.

Moreover, the lawsuit over Bluetooth was about marketing disclosures, not "crippling" phones features. And, in settling the lawsuit the plaintiffs explicitly acknowledged that Verizon Wireless "has the absolute right" to decide whether or not to include Bluetooth features on the phone it sells.

Open access advocates have not articulated precisely what problem they believe needs to be solved. The few restrictions cited do not prove that government intervention is needed, particularly by the means of a *Carterfone*-like open access regime.

What most concerns Verizon Wireless is not the fact that advocates of open access have not made a case for regulation. Nor is it that, as economic studies have repeatedly shown, generic government regulation is a poor substitute for competitive markets where consumers "vote with their feet" to inform carriers of what services they want and how much they are willing to pay for them.

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[5] Tim Wu, "Wireless Net Neutrality: Cellular *Carterfone* and Consumer Choice in Mobile Broadband," at 8, New America Foundation Working Paper #17 (Feb. 2007).

[6] *Id* at 26-27.

[7] *Id.* at 11.

What most concerns us is that open access regulation, particularly the vague, sweeping type that advocates are pushing by proposing the FCC's *Carterfone* regime be imposed on the wireless industry, threatens to disrupt the positive consumer experience that these groups claim to be promoting. Consumers want their wireless carriers to offer a secure, high-quality experience and to ensure reliable voice and data service, free from viruses and other threats that could compromise consumers' ability to use their mobile devices and the wireless network. But that experience is built on carriers' ability to manage their networks for the benefit of all their customers. Spectrum is a finite resource that must be managed efficiently for the benefit of all network users.

Open access regulation would be harmful to consumers in many respects. For example:

Decreased device security and increased risks of viruses and hacking. By integrating devices and applications with the network, carriers have been able to offer a broad range of spectrally efficient and reliable services to subscribers, generally free from security or privacy concerns. Consumers have occasionally chosen to bring their own devices and applications on to the network. When this occurs, there is no guarantee that the handsets or applications will operate in the most reliable, efficient or secure manner. Many applications that are touted as providing "open access" on their wireless handsets are the most apt to be hacked in to, allowing theft of private information or imposition of viruses and snoopware.

Harms to other users. There are currently available various "place-shifting" products which support streaming media transmissions from a home PC or television to a wide array of devices connected to a wireline or wireless network. These software and hardware based home media appliances offer end-users the capability to view streaming content (e.g., video, music, photos) from the home location over the Internet at a remote location with a PC, laptop or handheld device loaded with the application software. These applications use substantially more capacity than typical Internet surfing or email because they require more bandwidth and for longer and continuous periods of time. Thus, while the user of a TV place-shifting device may enjoy watching his home TV in the waiting lounge of an airport over a wireless broadband connection, such "bandwidth-hogging" usage can prevent other wireless users from accessing the network at all.

Modeling the network for anticipated usage and reasonable prices requires complex tradeoffs that only the wireless operator can achieve to maximize efficient network use. As long as wireless broadband services operate over limited and shared spectrum resources, more consumers will benefit when the network operator is making resource allocation decisions in the public interest as required by its spectrum licenses, rather than leaving resource allocation decisions to users on the network.

For example, in 2006, Verizon Wireless discovered that a customer had installed a repeater without our knowledge in a Manhattan office building. Our engineers immediately began to see degradation on the network. This single device negatively impacted almost 200 surrounding cell sites in the New York metro area, which resulted in tens of thousands of blocked voice and data sessions on our network. As this situation illustrates, if wireless network operators are not allowed to manage the products and services designed to be operated on their networks, service to consumers risks degradation.

Decreased incentive to innovate. An open access regime would threaten to shift the business of wireless network operators to primarily offering subscribers airtime. In this model, wireless network operators would have a decreased incentive to develop new products or services, because they would simply be in the business of providing airtime access for products chosen by the consumer, deterring investment away from network upgrades. Innovations made in wireless services and products over the past 14 years have kept pace with the innovations made in computer technology and Internet services; maintaining the existing wireless regulatory model will ensure that such investment and innovation continues in the future.

Harms to pro-consumer federal programs. Congress and the FCC currently implement many programs through the close relationship between wireless networks and the devices that operate on those networks. These include CALEA, the wireless E-911 program, hearing aid compatibility under Section 255 of the Communications Act, and Congress's plan for a nationwide wireless emergency alert system under the WARN Act, passed just last year. Forcing the separation of the sale of wireless devices from the wireless network would impair these programs because there will no longer be one person to whom Congress or the FCC can turn for implementation. A *Carterfone* regime not only undermines the ability of carriers to provide consumers with robust, innovative and secure wireless services, it also undermines the very consumer protection and homeland security programs that Congress and the FCC have put in place in reliance on the current regulatory regime for wireless services.

Conclusion

We are at a crucial juncture in the development of the nation's wireless industry. Over the past decade and a half, wireless consumers have come to expect – and rely on – their wireless phones, first as a safety device, then as a convenience, and increasingly an integral part of more than 220 million Americans' daily lives.

We can now call a friend from anywhere, send text messages and e-mails while walking down the street, and even watch television when we are nowhere near a conventional television set. It may seem like magic, but the work of thousands of dedicated men and women every day helps build, maintain and expand robust and secure wireless networks – and provide the customer service enabling tens of millions of Americans to use our products and services every day.

Verizon Wireless therefore urges that the Subcommittee adopt "national framework" legislation that will promote further growth of the wireless industry, while fully protecting all consumers in all states. We also respectfully urge that you resist calls for imposing new open access regulation, which would not serve consumers but only

disrupt and impede the tremendous contribution that the wireless sector makes to the nation's economy.

Mr. MARKEY. The gentleman's time has expired. Now, we recognize Professor Timothy Wu. Professor Wu is a professor of law at Columbia University Law School, and he served as a clerk for Justice Breyer on the United States Supreme Court. We welcome you, Professor Wu. Whenever you are comfortable, please begin.

STATEMENT OF TIMOTHY WU, PROFESSOR OF LAW, COLUMBIA LAW SCHOOL, COLUMBIA UNIVERSITY, NEW YORK, NY

Mr. WU. Thank you, Mr. Chairman, Ranking Member Upton. I am here today as a person who is an academic. I am not paid by any member of this industry. I am not in this industry, and I present my views simply as someone who has studied this industry in great depth and has come to the conclusion that there are reasons to be concerned about the direction this industry is headed and reasons to think that policy changes might be very important to continue the strength of America in technological leadership.

The United States, if we look comparatively at the rest of the world, leads the world in a lot of high-tech areas. We are the entrepreneurs, the innovators; this is our comparative advantage. Yet, it is often felt by American people, consumers, by people in the industry, by the world at large that one area that America really is not the technological leader is in the wireless space. We lead in the Internet applications, we lead in consumer electronics, we lead in computers and computer software, and I suggest the only different variable between these different industries is policy, that we have allowed, and although there have been a lot of positive developments in wireless, we have allowed one way or another for there to be a spectrum-based oligopoly in wireless that is controlling innovation, and it is controlling the development of devices and new devices in the wireless sector. And I suggest to you that that is the state of affairs that is not going to change overnight but that which this Government, this Congress, and the FCC has a duty to set us back to a direction towards an open market, toward a leave-in market, towards the kind of competitive innovative market that we have seen in computers, we have seen in consumer electronics, we have seen in the Internet that has made this one of the richest countries on Earth that we are lacking in the wireless sector.

Now, what I want to do and spend my time on today is trying to explain and make clear the difference between two what I think are very different issues. The wireless Carterfone issues which I have seen as the primary focus of our discussion here and the, I think, very different issues of what should be done with the spectrum that is coming available with the termination of broadcast television UHF, the 700 MHz auction. I want to make clear what the difference is between these two things because I think they are getting a little bit confused, and we have different policy options here that will deliver different results, and we need to understand what is going on between them.

So let me explain first of all what exactly wireless Carterfone means and why it is important not just in the 700 MHz context but important period for setting this country on the right path to becoming a world leader, the world leader, in wireless innovation.

Right now today, as some of the members have already noted, we have a very unusual situation when it comes to buying wireless devices. Over 90 percent of retail is controlled by the four carriers. You can't go to any old store and buy a cell phone. Most of it goes through the bottleneck of the carriers and devices the carriers think are the right phones for Americans. This is a very unusual situation, and moreover, when you buy these phones, there are two things that tend to happen. First of all, they tend to be locked to the particular network you buy them from, one way or another; and second of all, it can be very difficult and very complicated to bring your phone with you when you leave one service and move to another service. I mean, these phones are property. They are supposed to belong to Americans. You pay for them. You pay for them in higher monthly charges. I mean, this idea that you get these free, subsidized telephones, don't be fooled. You pay $50 up front, but the money is collected on a buy now, pay later basis. This money is paid by American consumers. These telephones are their property, yet they are not allowed to do with these telephones what they want. Imagine a situation where you bought a television set, you had cable service. You decide, I am done with cable, I am moving to satellite. The next thing you know, your television stopped working. That would be completely unacceptable. When people buy a television, they think, this is my television, I own it. If I want to move to broadcast, fine. If I want to move to cable, fine, satellite, fine. This is my property, I can do with it what I want. Telephones are nothing like that. They are locked to carriers, they are disabled from switching, and it is a situation which is unacceptable and will become increasingly unacceptable when we see companies like Apple trying to enter this market but being forced to be hamstrung and disable their devices from the full kind of compatibility that they should have.

And so the point of wireless Carterfone is addressing these issues, and the most important rule in addressing these issues is rules against locking and rules against blocking. Device portability must be allowed, and these phone companies should not be allowed to block applications that people want to use.

Now, I am running out of time. I want to say why these are different than 700 MHz.

Mr. MARKEY. I apologize to you, but you are over right now; but I think you are going to get plenty of questions, and I think the discussion might begin with our next witness.

[The prepared statement of Mr. Wu follows:]

Statement of

Tim Wu,
Professor, Columbia Law School

before the

House Committee on Energy and Commerce
Subcommittee on Telecommunications and the Internet

"Wireless Innovation and Consumer Protection"

July 12, 2007

Thank you Mr. Chairman, Mr. Upton, and members of the Committee.

For the last decade, the Congress and two administrations have been working to try and improve and promote the nation's wireless markets. In many respects that period has witnessed many great successes. Spurred by the opening of spectrum, cell phones are today widespread, attractive in appearance, and available in a variety of styles. Prices for service, at an average of about $600 per year, could be cheaper, but could be worse. There have even been unexpected policy success stories, like the unpredicted takeoff of WiFi that followed the unheralded creation of unlicensed spectrum by the FCC.

Nonetheless, you can talk to any American for a few minutes and you'll realize the task is not finished. People don't like the fact that they're locked into lengthy contracts with tricky billing plans, they don't like the limited selection of phones available in the United States, and they don't like fact that you can't take your phone with you when you change carriers. This tells us that while the "first generation" of wireless device policy has succeeded in its main task, the wide dissemination of mobile phone technologies, there is still work to do. As popular sentiment makes clear, the second generation of policy must take its goal increasing consumer welfare and opening the market to greater product diversity and innovation in the wireless markets.

One of the side effects of our chosen policies has been the creation and enfranchisement of a spectrum-based oligopoly—two dominant firms, and four total—that exercises great power over the wireless economy. That this has happened is not surprising. Telecommunications markets of all kinds have a well-known tendency toward monopoly and consolidation, and not necessarily for bad reasons: large carriers can be more efficient and give better coverage. But that natural tendency toward a monopoly on the nation's airwaves means that Congress and the Administration must retain oversight. Congress and the FCC must also take measures, when necessary, to ensure that the trustee's of the nation's spectrum serve the public's interests.

"Wireless Carterfone" is a phrase used to describe the second generation of wireless policy. That term comes from the famous *Carterfone* case that established what turned out to be landmark right in telecommunications law – the right to attach any safe device to a phone line. It is in the spirit of *Carterfone* that the present suggestions for the wireless industry are offered.

As of yet, what "Wireless Carterfone" should mean has not been made as clear as might be ideal. Today I want to explain more precisely what Wireless Carterfone means. I want to spend most of my time trying two explain two simple rules– the need for "device portability rules," and a "ban on blocking." These are two bedrock rules that can help fulfill the potential of the wireless markets.

1. ***Device Portability Rules***

Since 2003, consumers have benefited from rules called "number portability rules" that let you take your phone number from one carrier to another when you switch carriers. For example, I have personally had the same cell phone number since 1999, a 202 number that I got while working here in Washington. When I've switched carriers, the number follows along. It's a convenience, of course, but it also helps feed competition between the carriers, by making sure that fear of losing your number is no bar to leaving your carrier. Of course, unfortunately, what really prevents people from switching carriers are the contract termination fees, but more on that below.

But there's an anomaly in today's system. While you get to keep your number, you don't have any right to keep your *phone*, no matter how much you like it, paid for it, or how expensive it was. That's most obvious with the new iPhone, which, even though it costs $500 or more, becomes an expensive paperweight if you decide you want to leave AT&T. It, and many other phones, are "locked" to a single carrier. In addition, even if you go out and buy a phone you like, or have one given to you, you often cannot get the carrier to activate it on their network.

This state of affairs is very different than what we see in most consumer electronics markets. Imagine buying a television that stopped working if you decided to switch to satellite. Or a toaster that died if you switched from Potomac Power to ConEd. You'd be outraged – for when you buy something, that usually means you own it. But its not quite so when it comes to wireless devices.

Why are things this way? Some, though only some, is technological. Some carriers use different technical standards, making device portability sometimes impossible. But on the business side, for carriers, there are two major reasons for locking and blocking. The first is to help keep switching costs high, to prevent consumers from leaving for a competitor, and maintaining control over as many potential revenue streams as possible. If the consumer could easily buy a phone and then activate it, she'd have no need to sign a two-year contract with termination fees, making it much easier to leave if service turns out to be bad. In addition, "independent" phones might carry features that the carriers might want to block, like VoIP or media downloads not controlled by the carriers. The prospect of either of these outcomes leads to the two least attractive carrier practices: locking and blocking.

For consumers, I think some of the drawbacks of the current situation are obvious. Thanks in part (though not in whole) to these practices, most consumers are in a two-year plan of some kind with a phone provided by the carrier. For some consumers that's fine, because they take the two-year contract as a fair deal for the lower price they paid up front for their phone. But not everyone. Many consumers have their own phone they'd like to use, and would prefer to avoid a "buy now-pay later" contract. In addition, consumers suffer in terms of product diversity. Of the dozens of Nokia phones introduced every year, for example only a handful are "approved" and make it to U.S. customers. In the United States, it is difficult to get your hands on the variety of phones available in Europe and Asia, much less get them activated.

Beyond these consumer issues, lack of device portability has broad and important effects on innovation in wireless markets. The need to get permission before activation, coupled with a strong control over retail had made the existing oligopoly the gatekeepers of market entry in wireless. Entrepreneurs and even well established firms need get "approval" before bringing a phone to market.

That kind of control over market entry is the opposite of what we find in the markets where the U.S. high-tech industry is a world leader. Low cost market entry, while it sounds like economic jargon, has been the magic behind the internet, software, and computer revolutions, where anyone and a good garage might start a company. In much earlier times, arguably the relative ease of market entry in markets like agriculture in the 19th century is part of what has made the American economy different. But the wireless markets are the opposite: they are high entry cost markets at every level. The goal of the second generation of wireless policy should be to change that.

The consequence of controlled market entry is that many innovative but unknown companies have extraordinary difficulty getting to market at all. Things could be worse – its not quite the 1960s, when any telecommunications innovation had to go through the AT&T bottleneck. But when the criteria for market entry is "fit" with the plans of the major carriers, innovation is inevitably distorted. And since innovation and economic growth are so closely linked, this affects us all.

* * *

There are no easy or quick answers to the problems of excessive gatekeeper power and high costs of market entry in a telecommunications market. But big things can come out of small beginnings, and in the wireless markets a crucial matter are what can be called "device portability rules," a variation on the number portability rules. In outline form such rules say that:

(1) All mobile carriers must activate any device that the consumer wishes to activate and use on their network, provided that the device is
  (a) technologically compatible with the network,
  (b) does no harm to the network,
  (c) does not violate any law in its intended usage, and
  (d) can be billed for data and voice on the basis of usage.

(2) All mobile carriers are prohibited from selling telephones that are purposely disabled, locked or rendered incapable from operating on more than one carrier, whether through a SIM lock or any other mechanism.

These are small rules that may require some changes in the way companies do business, but are certainly very easy rules to follow. In fact, some of the weaker carriers like T-Mobile already follow these rules in part. At the very least what's required is less than was required for number portability. However, the long term influence of these rules would be broad indeed. They would usher in greater consumer choice; but more profoundly, would usher in an age of innovation on wireless networks in ways both predictable and not.

2. Banning Blocking

In Congressional testimony on the issue of "network neutrality," both in the House and Senate, representatives of the telephone and cable industries have repeatedly declared that they "will not block or degrade traffic, period." That promise, to the credit of the industries, has been kept to this date, and it has been important to ensuring the health of the broadband internet.

Unfortunately, in the wireless markets, blocking and degrading are not only a possibility, they are a regular practice. While full documentation of this problem is beyond the scope of this testimony, we might look as an example at the dataplan that AT&T requires of users of the Apple iPhone.

That plan, which governs the use of AT&T's data network, blocks (in capitals) the phone

> "FOR VOICE OVER IP, ... [and] FOR UPLOADING, DOWNLOADING, OR STREAMING VIDEO CONTENT (E.G. MOVIES, TV) MUSIC OR GAMES."

The degree to which these restrictions are enforced is not yet clear. Yet such bans on what consumers can do with their iPhones seem very far from the consumers' interests. And, as I have shown in other work, these are other blocks on the uses that wireless devices can be put are commonplace.

The problem with blocking on wireless mobile data networks is precisely the same problem on broadband networks. Its what led the industry to promise "no blocking" – it amounts to a serious distortion of markets that depend on the mobile network as a platform.

To counter the problem of blocking, I outline the following rule:

(1) No carrier shall block the use of any application or content on its wireless networks, unless necessary for
(a) enforcement of applicable law,
(b) the prevention of bonafide threats to the security of the network.

* * *

There will, of course, be opposition to both of these suggested rules, and let me speak briefly to that.

Tim Wu Statement

First, some might think that the phone "subsidy"—the discounts available on most cell phones—means that carriers have the right to do whatever they want. Don't be fooled: a phone "subsidy" is simply a buy now, pay later program. The full price of the phone is collected in higher monthly rates. So whatever the consumer may pay at first, the telephones are never a gift. The consumer pays in full for the phone he or she owns, and that phone is his property.

Second, some will argue that device portability rules will endanger the quality or security of the network. While no one doubts the importance of these issues, these arguments are generally red herrings. They are precisely the argument that the old AT&T made for decades through the 1970s to defend its rule denying consumers the right to attach telephones to its network.

Notice that we don't prevent consumers from hooking up the televisions or radios of their choice on the argument that they might install a "low quality" devices. In the end, consumers do not need phone companies to "protect" them from "bad" cell phones. They can make the choice on their own. And when they have that freedom, we will all be better off.

Mr. MARKEY. The next witness is Mr. Phil Verveer, who has been a frequent visitor to this committee over the years. He is a partner at the law firm of Willkie Farr & Gallagher and is chair of its telecommunications practice. He was also the lead attorney for the Department of Justice in the lawsuit to break up the old AT&T. The way things are going, we may need his talents again. We welcome you, Mr. Verveer. Whenever you are comfortable, please begin.

STATEMENT OF PHILIP L. VERVEER, PARTNER, WILLKIE FARR & GALLAGHER, WASHINGTON, DC

Mr. VERVEER. Thank you very much, Mr. Chairman. I appreciate the opportunity to testify before the subcommittee today. I think the proper question to be asked in terms of any of the issues that you are addressing is not whether or not we can do better. Of course we can do better, we always can do better. The real question is one of ways and means. What are the best ways and means to move forward?

Mr. MARKEY. That is a phrase we actually don't use in this committee. If you could find another way of describing.

Mr. VERVEER. So let me describe in terms of the best methods then in terms of moving forward. The received wisdom which is embodied in the Communications Act is that we should rely upon competition wherever we can, and the mobile wireless industry is indisputably workably competitive. You can see that in terms of the four national carriers and the regional carriers that are available. You can see it in terms of the statistics that have been mentioned by many members of the subcommittee this morning. That is both the reflection of and a consequence of section 332 of the Communications Act again as mentioned by many members of the subcommittee this morning.

Now, I suppose to paraphrase Senator Bentsen, I know Carterfone, I have made extensive use of Carterfone as an antitrust prosecutor and as an FCC official in the 1970s, and this is not Carterfone. Carterfone is not a precedent for Government intervention into product and service design in today's mobile wireless industry, and I will try to explain a couple of reasons why I believe that to be true. But first I think it may be worthwhile to briefly describe why it is that product and service design is something that both Congress and the FCC have normally sought to avoid, three pretty obvious reasons.

One, the Government has as much knowledge about issues of product and service design as industry does, and there is an inevitability both for Government and industry when we are talking about product and service design. The decisions have to be made in the face of uncertainty. In general, we are much better off if we let those decisions be made by the people in industry who have risen to the top of their respective companies.

Two, the Government requirements with respect to product and service design tend to inhibit product evolution and the ability to respond to new opportunities and changing demand as they arise. And three, Government due process requirements inevitably slow the entire process. The Part 68 terminal equipment connection arrangements that have been cited today and cited in the context of the Carterfone debate took as I well remember almost 10 years to perfect from the time of the Carterfone decision, and that example, I think, is an instructive example.

Now, why is it that Carterfone isn't really an appropriate precedent with respect to today's wireless industry? First, the old Bell system as you mentioned, Mr. Chairman, was a thoroughgoing monopoly. It was vertically integrated, it occupied about 85 percent of the telecommunications industry broadly defined. As it happens today, the four national wireless carriers occupy about 85 percent of their industry. The difference between one having an 85 percent market share and four having an 85 percent market share is a very large difference; and with deference to Professor Wu, whose work I admire greatly, I think the term oligopoly really may be a misnomer with respect to the wireless industry today, again, an industry with four national carriers and many regional carriers.

The second reason is arcane but is one I know the subcommittee is well familiar with and that is incentive structures arising from regulation today are entirely different from the ones that apply to the 1968 Bell system. Rate of return produced perverse incentives with respect to the activities of the old Bell system. The ability to discriminate, or in fact, the incentive to discriminate, even if it meant diminished use of the network, was something that was a function of that kind of regulation. Today's wireless companies are not subject to rate of return regulations. They are not subject to that set of incentives.

This entire dispute at a kind of abstract level is reminiscent of a lot of the disputes of the past. It can be characterized I think as one between static efficiency on the one hand and dynamic efficiency on the other. The difference between trying to achieve a lower point on a static cost curve versus the creation of new and lower cost curves. The Bell system was broken up in part, I am convinced, when it was and the way it was because of the work of this subcommittee. And some of the deregulatory activities in which I was involved, including the deregulation of terminal equipment and the determination there should be more than one cell phone company, were both commonly a judgment that dynamic efficiency and competition was the better way to go, and I believe it still is.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Verveer follows:]

Testimony of Philip L. Verveer

Good morning, Mr. Chairman, and members of the Subcommittee.

I appreciate the opportunity to present my views on innovation in today's mobile wireless industry. My testimony will focus on the apparently narrow subject of the relevance of the Carterfone "principle" to the contemporary wireless industry.[1] However, it is premised on realities that have broader implications for public policy. The mobile wireless industry is workably competitive and therefore largely deregulated, and its performance--from a consumer perspective--has been and continues to be very good. There is very little justification for changing the legal and regulatory framework within which it operates.

The FCC's 1968 Carterfone decision[2] held that telephone subscribers have the right to connect any device to the telecommunications network that is privately beneficial so long as it is not publicly harmful.

During the 1970s as an antitrust prosecutor at the Department of Justice and as an official at the Federal Communications Commission, I was involved in important initiatives that adopted and extended Carterfone. On the basis of years of close familiarity with the Carterfone precedent, I can say that mobile wireless is not a candidate for the very large extension of Carterfone that recently has been urged.

As a policy matter, the proposition that every wireless network should enable interconnection of any apparently suitable terminal device can be made to look like a simple application of consumer sovereignty. It isn't. Rather, it is a request for government intervention

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1 My firm has represented CTIA-The Wireless Association in connection with a petition filed by Skype Communications S.A.R.L. seeking the Federal Communications Commission's intervention with respect to cellphone terminal equipment. A copy of my firm's submission in connection with RM 11361 is attached to my testimony.

2 *In re Use of the Carterfone Device in Message Toll Service*, 13 FCC 2d 420 (1968), *recon.* 14 FCC 2d 571 (1968).

into the product and service design of an industry that is workably competitive and that, largely because of competition, is as dynamic and progressive as any in the communications sector.

This is a very bad idea, precisely because it is much more likely to harm consumers than to help them.

As with all jurisprudence, Carterfone arose in the context of particular circumstances that constituted both the requirement for and the basis of the decision. Those circumstances were fundamentally unlike those that prevail in the contemporary wireless industry. The differences are extensive, but only two need to be considered to make the point.

First, in 1968 the provision of telecommunications transmission service was a thoroughgoing monopoly. If consumers didn't like the price or performance of the terminal equipment that the old Bell System provided, they had no recourse. In that sense, consumers were captive. Carterfone, and nearly ten additional years of industry-government skirmishing to implement Carterfone, changed that to the benefit of consumers. Today's wireless industry consists of four national carriers, additional regional carriers, some quite significant in size, and the prospect of additional entry by a cable television consortium that recently invested more than $2 billion to acquire spectrum covering almost all of the country. Obviously, the situation of today's wireless consumers in terms of choice is different and dramatically better.

The second difference is more arcane, but quite important. The prohibition on "foreign attachments" that Carterfone struck down was, in its economic motivation, mainly an effort to evade rate regulation. The Bell System telephone companies were subject to a particular type of rate regulation that had a profound effect on their incentives. Rate of return regulation prevented the companies from charging the monopoly price for service. This gave them an incentive to attempt to exploit the service monopolies in adjacent markets, such as terminal equipment, and an equivalent incentive to protect their terminal equipment business without regard to whether doing so diminished the utility and the usage of their core transmission business. To the extent the prices they charged for terminal equipment or the prices they paid their affiliated manufacturer for terminal equipment were less regulated than the prices they charged for service, they were better off. Stated differently, the Carterfone-era telephone companies had a rational incentive to discriminate—that is, to decline to engage in otherwise profitable business as a function of the particular type of rate regulation to which they were subject. Today's wireless industry is not exposed to equivalent incentives for the obvious reason that it is not rate regulated. There is no reason to suspect that wireless firms have a rational incentive to discriminate. They are free to charge as they wish for their transmission service, and over the history of the industry there have been enormous changes in the rates and rate structures the carriers have employed. The conventional inference--that their rates and rate structures are designed to maximize profitable usage of their networks—applies. If a wireless firm diminishes the utility that consumers derive from its service, it risks the loss of customers and of revenue. The companies may do this by mistake from time-to-time, but corporate mistakes not involving health and safety are not a justification for government intervention.

Apple's much-admired new iPhone provides an example of why some believe the government should intervene and why I believe it should not. The concern is centered on the exclusive arrangement that Apple negotiated with AT&T. Why shouldn't subscribers to other carriers have an opportunity to use the device? The answer to the question is that AT&T's competitors will be compelled to respond if the iPhone comes close to meeting expectations. They already are, as shown by the contemporaneous introduction of a WiFi phone by T-Mobile. This kind of competitive thrust and parry has produced constant dramatic improvements in the price and quality of cellphone service over its entire history. Wireless carriers react to each others' initiatives and to consumer demands because they must. This is pretty good evidence that consumers are sovereign. It also is a pretty good indication of why the burden of proof falls heavily on those that seek government intervention in wireless product design. The varied practices of the wireless companies may not please some consumers some of the time, but no one doubts the industry's dynamic character.

It seems to me that the present debate constitutes an instance of the very familiar tension between static efficiency and dynamic efficiency, between law and regulation designed to encourage reaching the lowest point on a cost curve and law and regulation designed to encourage the creation of new, lower cost curves. Three decades ago, the government policy activities affecting communications in which I was involved included the deregulation of terminal equipment and the determination that there should be more than one cellphone company in each market. These decisions were based on the view that competition and the dynamic efficiency it produces more reliably secure consumer welfare than regulation. There are instances in which government intervention surely is warranted—free markets are not found in nature—but where an industry is working as well as mobile wireless, the circumstances justifying regulation must be materially more aggravated than those described by interests seeking an extension of the Carterfone "principle."

Thank you, again, for the opportunity to testify. I would be pleased to respond to any questions members of the Subcommittee may have.

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	:	
Skype Communications S.A.R.L.	:	
	:	RM-
Petition to Confirm A Consumer's Right to Use Internet Communications Software and Attach Devices to Wireless Networks.	:	
	:	

AN ANTITRUST PERSPECTIVE IN RESPONSE TO SKYPE'S PETITION

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April 26, 2007

"Experience has shown that government-imposed restrictions are among the most effective and durable restraints on competition."[3]

Skype's petition asks the Commission to intervene in a vibrantly competitive marketplace by resurrecting the visage — and vestige — of a hidebound monopoly. The contractual relationships among wireless providers, handset manufacturers and, most importantly, consumers have fostered an environment today that Tom Carter would not recognize: it is dominated by no one, it is replete with technical innovation, and it achieves ever broadening use and declining prices.

The application of antitrust principles to today's wireless market supports no theory on which Skype can contend that the wireless carriers have engaged in anticompetitive conduct. Indeed, it supports the opposite — that relationships among carriers and handset manufacturers generate efficiencies that promote competition.

In addition, the wireless carriers do not have unlimited capacity and ability to accommodate all technologies. If Skype's request is granted, it will not be without consequence. To the extent regulation requires carriers to adapt their businesses in ways that increase their costs or compromise their service, Skype may be happy but consumers will either pay more or get less. That is because, fundamentally, Skype wants the Commission to intervene to correct what it believes are bad business decisions by the wireless carriers; it wants the Commission to give priority to what Skype thinks the market desires and how Skype thinks the wireless carriers should manage their businesses, rather than let the competitive process determine the direction the market will take.

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3 FTC, Prepared Statement to Congress: *An Overview of Federal Trade Commission Antitrust Activities*, March 7, 2007 at 24-27 (describing instances where the FTC has urged state and federal lawmakers to refrain from or limit regulation), available at http://www.ftc.gov/os/2007/03/index.shtm (last visited April 23, 2007).

The Current Market Structure Makes Anticompetitive Harm Unlikely

The root complaint of Skype's petition appears to be that wireless carriers are using their influence "to maintain an inextricable tying of applications to their transmission networks and are limiting subscribers' rights to run applications of their choosing." Petition at 2. Skype thus implicates two markets for consideration: the wireless network operators (the "primary" market) and the handset market (the "secondary" market). Petition at i.[4] This relationship consists of bundling handsets together with the wireless service that makes them useful and can be characterized as a "vertical" relationship.

Consumer harm in vertical cases is measured by the degree of foreclosure in a defined market that the dominant firm can effect through its market position. As shown below, there is no such foreclosure, nor can there be. As an initial matter, *any* consumer harm in a vertical case requires market power in at least one market. *See, e.g.,* IIIA Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 756a, at 8 (2d ed. 2002) ("Without substantial market power at any relevant production or distribution stage, vertical integration lacks antitrust significance. It is either competitively neutral or affirmatively desirable because it promotes efficiency."); *id.* at 9 ("In the absence of market power, 'foreclosure' is inapt.").

Moreover, even in the presence of a monopoly, "[w]hen the primary market monopolist integrates into a competitive secondary market, no injury to competition is ordinarily apparent ... [this] is a clear candidate for a rule of absolute legality." *Id.* ¶ 759c, at 36. Today, no monopoly

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4 Elsewhere in its petition, Skype describes a "'permission-based' approach to innovation," at 13; and points to "handset locking," "terms of service limitations" and "lack of open development platforms," *id.* at 16-20. The thrust of Skype's petition seems to be that wireless carriers are using their position in the primary wireless market in order to restrain handset design, including handsets' compatibility with certain software applications. While it is not clear from Skype's petition whether handsets are a distinct market from the applications that run on them, the antitrust implication remains the same: absent market power in either market, as is the case, how the wireless carriers choose to compete should be left to their judgment and market forces, not dictated by the judgment of Skype and others.

exists in either the market for network services or the market for handsets. As such, anticompetitive harm *cannot* stem from vertical relationships among such firms.

The FCC's eleventh *Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Radio Services* ("*Eleventh CMRS Report*") to Congress finds a robust and increasingly competitive landscape:

> "[T]here is effective competition in the CMRS marketplace." FCC, *Eleventh CMRS Report*, 21 FCC Rcd 10947 at 4 (2006), *available at* http://wireless.fcc.gov/crmsreports.html.
>
> "[C]ompetitive pressure continues to drive carriers to introduce innovative pricing plans and service offerings, and to match the pricing and service innovations introduced by rival carriers." *Id.*
>
> "Consumers continue to pressure carriers to compete on price and other terms and conditions of service by freely switching providers in response to differences in the cost and quality of services." *Id.* at 5.
>
> "In addition to the nationwide operators, there are a number of large regional players ...." *Id.* at 14.

The Commission found that 268 million people, or 94 percent of the U.S. population, "live in counties with four or more mobile telephone operators competing to offer service;" 145 million people, or 51 percent of the U.S. population, live in counties with "five or more mobile telephone operators competing to offer service;" and fifty million people, or 18 percent of the U.S. population, "live in counties with six or more mobile telephone operators competing to offer service." *Id.* at 20.

At year-end 2005, the top five wireless network operators together constituted approximately 89% of the market for wireless telephone services: AT&T/Cingular represents roughly 26%; Verizon has 25%; Sprint/Nextel has 22%; T-Mobile has 11%; and Alltel has 5%. *Eleventh CMRS Report*, app. A, tbls. 2 & 4. Twenty other providers, seven of which each served more than one million subscribers, constitute the remainder of the market. *Id.* In its petition at

21, Skype notes the U.S. market concentration in wireless had an average HHI of 2706.[5] However, this level of concentration, in its proper context, indicates no potential for anticompetitive harm to consumers.[6]

Finally, irrespective of the level of concentration, the fact that effective competition exists is shown by dramatically increased usage rates and declining prices. The average minutes of usage per month among wireless subscribers has increased from 140 to 740 since 1993. *Eleventh CMRS Report*, tbl. 10. In the same period, the average revenue per minute has declined from \$0.44 to \$0.07. *Id.*

Wireless Carriers' Relationships With Handset Manufacturers Promote Efficiency

In today's wireless marketplace, as in other vertical arrangements, bundling clearly has a *pro-competitive* effect. As discussed above, vertical relationships do not run afoul of antitrust laws where the integrating firms lack market power in their respective markets. Rather, it may be "affirmatively desirable because it promotes efficiency." Areeda & Hovenkamp, *supra*, ¶ 756a(1), at 8. This is especially true "as products become more technical and specialized and as an ongoing relationship between bargaining opposites requires increasing amounts of coordination …." *Id.* ¶ 757c, at 26-27 (discussing transactional efficiencies). In this context it is widely recognized that:

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[5] Skype acknowledges that "applications like Skype have been uncoupled from the underlying Internet access network and can operate across heterogeneous broadband platforms." Petition at 2. This suggests that a more appropriate market definition includes all broadband providers, which yields a much lower HHI of approximately 1110. Christopher S. Yoo, *Network Neutrality and the Economics of Congestion*, 94 Geo. L.J. 1847, 1893 (2006). The courts endorse this approach. *See, e.g.*, *United States Telecom Ass'n v. FCC*, 290 F.3d 415, 428 (D.C. Cir. 2002) (finding the Commission "completely failed to consider the relevance of competition in broadband services coming from cable (and to a lesser extent satellite)."). However, as this memorandum shows, there is no problem even under the narrower market on which Skype's petition is based.

[6] It is significant that in 1992, when the Commission clarified its policy allowing bundling of cellular service and CPE, the wireless HHI was *5000*; the market constrained by a duopoly. *Bundling of Cellular Customer Premises Equipment and Cellular Service*, Report & Order, CC Docket No. 91-34, FCC 92-207, 7 FCC Rcd 4028 at ¶ 11 & n.21 ("*CPE Bundling Order*"). Moreover, even with an average HHI of 2706, the Commission noted the North American market is less concentrated than, for example, in Western Europe, excluding the United Kingdom. *Eleventh CMRS Report* at 23.

> "In the absence of any purpose to create or maintain a monopoly, the [Sherman Act] does not restrict the long recognized right of trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal."

United States v. Colgate & Co., 250 U.S. 300, 307 (1919).

The critical efficiency of bundling is that it provides easy access to Customer Premises Equipment (CPE). Skype points to the low, "highly subsidized" cost of CPE as a "consumer harm," Petition at 13, without specifying what that harm may be. In fact, the FCC already has endorsed this efficiency, finding the low cost of CPE that results from bundled services only benefits consumers: "[T]here appear to be significant public interest benefits associated with the bundling of cellular CPE and service [because] *the high price of CPE represents the greatest barrier to inducing subscription to cellular service*." *CPE Bundling Order* ¶ 19 (emphasis added). Nor did the Commission limit its endorsement based solely on the absence of harm to competition: "[O]ur policy to allow the bundling of cellular CPE and cellular service furthers the Commission's goal of universal availability and affordability of cellular service and thus promotes the continued growth of the cellular industry." *Id.* at ¶ 20.

An equally important effect of bundling is that it allows the wireless carriers more effectively to compete with each other. "Vertical restrictions promote interbrand competition by allowing the manufacturer to achieve certain efficiencies in the distribution of its products." *Continental T.V., Inc. v. GTE Sylvania, Inc.*, 433 U.S. 36, 54 (1977). The Supreme Court in *Continental T.V.* also recognized that, even where market power exists, interbrand competition "provides a significant check on the exploitation of intrabrand market power because of the ability of consumers to substitute a different brand of the same product." *Id.* at 52 n.19. As noted above, the FCC recognized in the *Eleventh CMRS Report*, at 5, such interbrand competition is vigorous, driven by consumers "freely switching providers."

Another pro-competitive justification of bundling is the elimination of "free riders," those firms — either upstream or downstream — that seek to capitalize on the infrastructure investments made by others.[7] Here, the development of the wireless infrastructure has cost, and continues to cost, tens of billions of dollars. To the extent the networks are able to manage applications like Skype from consuming scarce network capacity and bandwidth without paying, competition law allows such a return on investment. *United States Telecomm. Ass'n v. FCC*, 290 F.3d 415, 424 (D.C. Cir. 2002) ("If parties who have not shared the risks are able to come in as equal partners on the successes, and avoid payment for the losers, the incentive to invest plainly declines.").

Free riders do not merely discourage investment by individual firms competing with the free rider, they undermine the existence of the infrastructure itself. Investment disincentive produces "a deterioration of the system's efficiency because the things consumers desire are not provided in the amounts they are willing to pay for. In the extreme case, the system as a whole could collapse." *Rothery Storage & Van Co. v. Atlas Van Lines*, 792 F.2d 210, 221 (D.C. Cir. 1986) (citing the elimination of free riders as the "chief efficiency" that justified purportedly anticompetitive conduct), *cert. denied*, 479 U.S. 1033 (1987).

The explosive growth of technology is another efficiency that the relationships between network providers and handset manufacturers has fostered. This growth cannot be squared with Skype's bald assertion that wireless carriers' influence with handset design creates an "innovation bottleneck." Petition at 13. At least one court has found the notion logically

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[7] These infrastructure investments are not limited to wireless technology, but are an important component of the larger broadband infrastructure. In that context, the FCC has expressly recognized the procompetitive efficiencies of limiting free-riders and allowing business arrangements that ensure a return on investment: "The record shows that the additional costs of an access mandate diminish a carrier's incentive and ability to invest in and deploy broadband infrastructure investment." *Appropriate Framework for Broadband Access To the Internet Over Wireline Facilities*, Report & Order, CC Docket No. 02-33, FCC 05-150, ¶ 44 ("*Appropriate Framework for Broadband Access*").

unsound. In *In re Wireless Telephone Services Antitrust Litigation*, 385 F. Supp. 2d 403, 429 (S.D.N.Y. 2005), which is discussed further below, the court pointed out that "[s]ince the defendants do not manufacture handsets, and compete with each other through offering handsets with service, it is against each defendant's self-interest to discourage competition among handset manufacturers . . . ." The same court found that terms of service limitations, which Skype complains "go beyond a carrier's reasonable business interests," Petition at 19, also foster innovation in the handset market:

> "As a matter of logic, the need for consumers to buy new handsets when they switch plans should increase competition in the handset market. Defendants contend and plaintiffs do not disagree that the defendants use their offers of handsets at the lowest possible prices to compete with each other. The increased sales of handsets that result from this practice and *the incentive to use handset innovations as a draw* to bring new customers to a new service provider foster competition in the tied product market."

385 F. Supp. 2d at 430 n.40 (emphasis added).

Assuring the quality of the network is perhaps the most practically significant efficiency of a close relationship between network operators and handset makers or, for that matter, applications writers. Wireless carriers' ability to constrain or restrain certain design characteristics in handsets benefit the network at both ends of the technology spectrum. At the low end, mandating certain capabilities insures that handsets are of high quality and do not burden the network with inferior connectivity or capability. At the high end, restricting the use of certain bandwidth-intensive features insures that "one customer's usage of the network [does not] degrade the quality of service that other customers receive." Yoo, *supra* note 2, at 1852. Indeed, *Carterfone* itself supported this efficiency of vertical integration, as the FCC relied primarily on the *absence* of harm to the network in invalidating the tariff. *In re Use of the Carterfone Device in Message Toll Tele. Serv.*, 13 F.C.C.2d 420, 423 (June 26, 1968).

In today's wireless marketplace, mandating or restricting the applications that run on handsets is the most economical means of managing the network. Yoo, *supra* note 2, at 1852-53. This is because, with certain applications, there is no effective way to meter bandwidth usage to insure that low-bandwidth users are not in effect subsidizing high-bandwidth users. This efficiency is particularly apt concerning Skype. First, Skype's applications (including video teleconferencing, file transfers, and "Skypecasts," or "*live, moderated conversations with up to 100 people*," eBay Inc., 2006 Annual Report (2007) ("eBay 2006 Annual Report") at 8, are inherently bandwidth intensive. Second, Skype's peer-to-peer methodology has succeeded without significant infrastructure investments through its model of creating "supernodes." A supernode uses its subscribers' bandwidth even when that particular user is not actively using the network, *i.e.* the user is an unwitting host to other Skype users' calls. Saikat Guha, et al., *An Experimental Study of the Skype Peer-To-Peer VoIP System* (2006).[8]

Together, these characteristics hinder the ability of a network operator economically to meter the usage of a finite resource, bandwidth, for purposes of tiered pricing.[9] As Professor Yoo summarizes:

> "[T]ransaction costs associated with a usage-sensitive pricing system can consume all of the economic benefits associated with a shift to usage based pricing .... The indeterminacy of the problem justifies adopting policies that do not foreclose network operators from experimenting with

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[8] *Available at* http://209.85.165.104/search?q=cache:zImPT-SK_icJ:iptps06.cs.ucsb.edu/papers/Guha-skype06.pdf+%22Experimental+Study+of+the+Skype%22&hl=en&ct=clnk&cd=1&gl=us (last visited April 21, 2007).

[9] The Commission has acknowledged the metering problem in another context, by exempting VoIP communications from state regulation on the grounds that complying with a state's requirements to identify a VoIP call's geographic end-points is impossible. *See Minnesota PUC v. FCC*, No. 05-1069, No. 05-1122, No. 05-3114, No. 05-3118, 2007 U.S. App. LEXIS 6448, at *14 (8th Cir. Mar. 21, 2007) (citing *In re Vonage Holdings Corp.*, 19 F.C.C.R. at 22418 ¶ 23 ("the significant costs and operational complexities associated with modifying or procuring systems to track, record and process geographic location information as a necessary aspect of the service would substantially reduce the benefits of using the internet to provide the service, and potentially inhibit its deployment and continued availability to consumers.")).

> any particular institutional solution absent the demonstration of concrete competitive harm."

Yoo, *supra* note 2, at 1852-53.

Faced with Skype's disproportionately high bandwidth usage and elusive, transitory system of supernodes — both of which may adversely affect other users' use of the network — a business arrangement that limits[10] Skype's access to the network through handset design or terms of service limitations is an efficiency that inures to the benefit of all network users. Finally, while addressing the security concerns posed by applications like Skype is beyond the focus of this response, a brief survey of Skype's security bulletins indicates that the question of "what harms the network?" is significantly more complex today than it was in 1968.[11]

In sum, Skype's model of bandwidth usage is perhaps the best illustration of the need for limiting the functionality of handsets, a limitation without which the wireless networks and the service that they provide would be degraded.

Without Question, Such Efficiencies Have Been Passed On To Consumers

It is important to highlight that even Skype acknowledges the fact that there have yet been no anticompetitive effects caused by the conduct alleged in its Petition. Petition at 5 ("*Before* anti-consumer practices take root and innovation suffers, the Commission should examine the policies that have guided the industry to date ... to *keep* wireless communication

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[10] It bears emphasis that a network operator, by limiting the capability of its own handsets, only restricts Skype's access to the network; it does not prevent it. Skype itself markets Wi-Fi capable handsets and any consumer who wishes may choose a Skype phone and calling plan. *See* Marguerite Reardon, "Skype Intros New Wi-Fi Phones," CNET News.com (July 20, 2006), *available at* http://news.com.com/Skype+intros+new+Wi-Fi+phones/2100-7351_3-6096681.html (last visited Apr. 18, 2007).

[11] *See, e.g.,* SKYPE-SB/2006-002 (Oct. 3, 2006), *available at* http://www.skype.com/security/skype-sb-2006-002.html ("In some circumstances, a Skype URL can be crafted that, if followed, could cause the execution of arbitrary code on the platform on which Skype is running.") (last visited Apr. 21, 2007); SKYPE-SB/2006-001 (May 19, 2006), *available at* http://www.skype.com/security/skype-sb-2006-001.html ("In some circumstances, a Skype URL can be crafted that, if followed, initiates the transfer of a single named file to another Skype user.") (last visited Apr. 21, 2007); SKYPE-SB/2005-003 (Oct. 27, 2005), *available at* http://www.skype.com/ security/skype-sb-2005-03.html ("Skype can be remotely forced to crash due to an error in bounds checking in a specific networking routine.") (last visited Apr. 21, 2007).

open to innovation and competition.") (emphasis added). This is no slip — Skype must acknowledge that these efficiencies and resulting cost savings to consumers are the direct result of what can only be described as a dynamically competitive marketplace.

As the discussion above establishes, there is little or no likelihood of consumer harm that *could* follow vertical arrangements between non-dominant carriers and non-dominant handset manufacturers. The theory has been borne out in practice in two fora that have applied specific facts — one in the courts, the other in the marketplace itself.

Skype asserts, citing no authority, that "[t]he wireless industry remains the only widely-used communications network in which the network operators exercise effective control over the devices used by consumers." Petition at 8. Providing a specific rebuttal of this contention, in a case on all fours with Skype's petition, is *In re Wireless Telephone Services Antitrust Litigation*, 385 F. Supp. 2d 403 (S.D.N.Y. 2005). In *Wireless Telephone*, plaintiff consumers sued AT&T, Cingular, Sprint, Verizon and T-Mobile, complaining that "the practice of requiring customers to purchase an approved handset in order to subscribe to [each] defendant's wireless telephone services constitutes an unlawful tying arrangement." Granting summary judgment for defendants, the court found no evidence "that any one of the defendants had sufficient power in the market for wireless service to 'force' consumers, within the meaning of the antitrust laws, to purchase unwanted handsets." 385 F. Supp. 2d at 417.[12]

First, the court found that no wireless carrier possessed a market share of 30%, "the minimum sufficient by itself to confer market power." 385 F. Supp. 2d at 418. Second, even assuming that "all handset sales flow through the carriers' distribution system," the court found, as a matter of law, that this was a choice of handset manufacturers, not a condition imposed upon

12 The court also expressly found that "the use of term contracts cannot be said to exclude competition," *id.* at 423 (addressing another of Skype's concerns); *see* Petition at 18-19.

them. 385 F. Supp. 2d at 426 ("To find that such a choice is not a choice at all but instead proves an anticompetitive impact defies logic."). The court also considered the absence of entry barriers in either the network market, *id.* at 420, or the handset manufacturing market, *id.* at 424, in granting summary judgment for defendants.

Finally, the court noted the amount of "churn," or turnover from one carrier to another, as evidence that anticompetitive conduct, if possible, was unavailing in the marketplace: "The enormous amount of churn in this industry eviscerates the suggestion that consumers do not view these brands and the services underlying them as essentially interchangeable." *Id.* at 420.

A more practical illustration, provided by the marketplace itself, lies in Skype's own cited authority. Skype, in passing, points to the exclusive relationship between Apple and AT&T/Cingular to show the influence of network providers over handset manufacturers. Petition at 16 & n.30 (noting "the extraordinary effort that Apple made to break the hold of wireless carriers in order to develop the iPhone.").[13] An examination of that relationship, however, shows that Skype has the balance of power backward. In fact, Apple's effort is illustrative both of the level of competition that prevails in the wireless marketplace and the influence that handset makers — those who invest in a compelling product — have over sometimes captive network operators.

While Skype accurately points out the iPhone works only on AT&T's Cingular wireless network, it overlooks the fact that this is at *Apple's* insistence, not Cingular's. Sharma, et al., *supra* note 11, at A1. Apple imposed other conditions as well: Cingular had to agree not to place its brand on the body of the phone; it had to abandon "its usual insistence" that its software be installed on the phone; and it agreed "to share with Apple a portion of [its] monthly revenue

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13 Skype quotes, but does not cite the article by Amol Sharma, Nick Wingfield & Li Yuan, *Apple Coup: How Steve Jobs Played Hardball in iPhone Birth*, Wall St. J., Feb. 17, 2007, at A1.

from subscribers." *Id.* Moreover, Cingular agreed to these terms before more than three people at the company even got to see the iPhone — throughout development, Cingular teams were isolated to specific tasks "without knowing what the other teams were up to." *Id.* At least one other network provider was approached by Apple but decided not to "play ball" under such restrictive terms. *Id.* (Verizon "balked at the notion of cutting out its big retail partners, who would *not be allowed* to sell the phone.") (emphasis added).[14]

Under Skype's theory that "network operators exercise effective control over the devices used by consumers," Petition at 8, such influence by a handset manufacturer over the largest network operator should be impossible. Indeed, the reality negates Skype's entire proposition and shows the marketplace operated exactly as it should — Apple, a firm new to both the handset and network markets, invested a great deal of time and money to develop a product it thought consumers would demand.[15] The product was compelling enough that it caused Cingular to scuttle any semblance of "effective control" over its development.[16]

Will Apple's Steve Jobs someday stand along Tom Carter as a giant in the telecommunications industry? The question may be irrelevant to Skype's petition, but the answer will speak volumes because of the forum from which it stems: Tom Carter depended on the courts and the FCC for the Carterfone's acceptance; the success of the iPhone will be

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[14] *See also* Leslie Cauley, "Verizon Rejected Apple iPhone Deal," *USA Today* (Jan. 29, 2007) ("balking at Apple's rich financial terms and other demands," Verizon declined "to be the exclusive distributor of the iPhone."), *available at* http://www.usatoday.com/tech/news/2007-01-28-verizon-iphone_x.htm (last visited Apr. 13, 2007).

[15] While no doubt the iPhone was expensive to develop, such start-up costs are universal characteristics and not "impairment" in the antitrust sense. *See United States Telecomm. Ass'n v. FCC*, 290 F. 3d 415, 427 (D.C. Cir. 2002).

[16] The iPhone also was compelling enough that, even before it has become available, competitors are answering the call with their own next generation, multifunction wireless devices. *See, e.g.*, Gary Krakow, "iPhone Has a Two-Faced Challenger," MSNBC.com (April 23, 2007) (announcing Samsung's aptly-named "UpStage" handset), *available at* http://www.msnbc.msn.com/id/18091591/wid/11915829 (last visited April 24, 2007).

determined solely by the *marketplace*. Today, unlike 1968, any firm has the same opportunity to leverage the fruits of its innovation.

<u>There Is No Risk of Competitive Harm on Which to Justify Government Regulation</u>

The above analysis shows that Skype, in the guise of consumers, has chosen the FCC as its forum precisely because it cannot show that there has been any anticompetitive harm to consumers. The proposition that regulation should not lead where no harm to competition exists is well established by the courts. *See, e.g., Verizon Comms. Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004) ("just as the 1996 [Telecommunications] Act preserves claims that satisfy existing antitrust standards, it does not create new claims that go beyond existing antitrust standards."); *United States v. Visa U.S.A., Inc.*, 344 F.3d 229, 242 (2d Cir. 2003) ("the proper inquiry is whether there has been an *actual* adverse effect on competition as a whole in the relevant market." (citation and internal quotation marks omitted)); *In re Wireless Tel.*, 385 F. Supp. 2d at 424 (citing *Roy B. Taylor Sales, Inc. v. Hollymatic Corp.*, 28 F.3d 1379, 1385 (5^{th} Cir. 1994) ("Speculation about anticompetitive effects is not enough.")).

The maxim has been repeated by regulators, too: "While interested parties will always lobby for policies that benefit them, we do consumers the best service when we ensure that markets are competitive and do not impose unnecessary barriers or restrictions on free competition through our own policies." *Protecting Consumers in the Next Tech-Ade, Hearing Before the Federal Trade Comm'n*, No. P064101 (Nov. 6, 2006) (testimony of Deborah Platt Majoras, Chairman of the Federal Trade Comm'n) at 13. As the Federal Trade Commission has recognized: "Experience has shown that government-imposed restrictions are among the most effective and durable restraints on competition." *See supra*, n. 1.

The FCC expressly endorses — and should continue to espouse — the theory. Indeed, the FCC's "guiding principle" is to "allow[] competitive markets to be driven by market forces, rather than unnecessary regulatory requirements." 1998 *Biennial Regulatory Review*, FCC 98-258 at 4. The Commission also has stated that "[w]e agree with the FTC Staff and the DOJ that the most efficient government policy is to allow firms the ability to choose how to distribute their own products ... the possibility that one type of retailer may be harmed does not provide a basis for a rule that limits the use of a potentially efficient contract or retail distribution system." *CPE Bundling Order* ¶ 28 (internal quotations and citation omitted).

It is axiomatic that "there is no duty to aid competitors." *Trinko*, 540 U.S. at 411. In this context it is important to distinguish harm to a competitor from harm to competition. Even if Skype's business opportunities are foreclosed by the relationships between network providers and handset manufacturers (despite no evidence that this is so), it does not follow that consumers will suffer any harm. *See* Areeda & Hovenkamp, *supra*, ¶ 756a(2), at 10. Indeed, nothing prevents Skype from competing for its own sake. "If competitors can reach the ultimate consumers of the product by employing existing or potential alternative channels of distribution, it is unclear whether such restrictions foreclose from competition *any* part of the relevant market." *Omega Envtl., Inc. v. Gilbarco, Inc.*, 127 F.3d 1157, 1163 (9th Cir. 1997). Or, like Apple, a firm may simply force open the channels of distribution by making network providers an offer they can't refuse.

Skype has available to it the tools it needs to compete in the marketplace, but it would rather ride for free.[17] Its place at the table has been confirmed by the Commission's recent order, granting wholesale telecommunications carriers the right to interconnect and exchange traffic

[17] Moreover, Skype's business model suggests not that it may be harmed by network operators' practices, but that it seeks to extend an already unfair advantage. First, Skype already plays on an unlevel field, as shown in the public documents of its parent company, eBay: "Skype's voice communications products are currently subject to very few, if any, of the same regulations that apply to traditional telephony and to VoIP-based telephone replacement services." eBay 2006 Annual Report at 19. Moreover, "[s]uch regulations could result in substantial costs depending on the technical changes required to accommodate the requirements, and any increased costs could erode Skype's pricing advantage over competing forms of communication." *Id.* at 19-20.

with incumbent local exchange carriers, specifically for VoIP applications. Memorandum Opinion & Order, DA 07-709, FCC Docket No. 06-55, Mar. 1, 2007. The court in *Wireless Telephone* noted the same fact. 385 F. Supp. 2d at 420 ("to compete with [the five largest wireless carriers], a seller of wireless services does not even need an FCC spectrum license, as the growth of the mobile virtual network operator has shown.").[18] Finally, we have found no indication that Skype, its parent company eBay, or any company affiliated with it chose to participate in the Commission's recent Advanced Wireless Services Auction.[19]

Conclusion

From an antitrust perspective, this response assumes that bundling exists in the wireless marketplace, as Skype's petition implies. The foregoing shows that even with the benefits of a relationship between network operators and handset manufacturers, the future harm about which Skype is worried is not likely to follow. Unlike the days of *Carterfone*, in a marketplace for contractually bundled products, firms today compete at both levels to be part of the "bundle." Such competition is vigorous and it ought not be replaced by premature regulation, however well-intended.

18 "A mobile virtual network operator orders handsets from a large handset manufacturer and resells network capacity leased at wholesale rates from a major wireless service provider." 385 F. Supp. 2d at 420 n.23.

19 FCC, *Auction 66 Advanced Wireless Services (AWS-1)*, All Bidders Spreadsheet, *available at* http://wireless.fcc.gov/auctions/66/charts/66bidder.xls (last visited Apr. 13, 2007).

Mr. MARKEY. Thank you, Mr. Verveer. Our next witness is Mr. Jason Devitt. He is the founder and CEO of Skydeck and the founder and former CEO of Vindigo. Both Skydeck and Vindigo develop software applications for use on mobile devices. Welcome, Mr. Devitt.

STATEMENT OF JASON DEVITT, CO-FOUNDER AND FORMER CEO, VINDIGO, CO-FOUNDER AND CEO, SKYDECK, MEMBER, WIRELESS FOUNDERS COALITION FOR INNOVATION

Mr. DEVITT. Thank you and happy birthday, Mr. Markey, ranking member Mr. Upton, and members of the subcommittee. Thank you for the opportunity to come and testify before you today.

I am a small business owner. I don't like regulators, no offense. I am here today because I don't have a choice with respect to wireless.

Mr. MARKEY. Yes, you wouldn't exist without us.

Mr. VERVEER. Precisely. That is precisely the point. In the context of wireless spectrum, I do not have a choice. We do not have a choice between no regulations and regulations. We have a choice between badly written regulations and regulations that work; but I put on a suit today for the first time in 18 months and flew here from Silicon Valley to tell you that we have a regulatory system that doesn't work, and the only way that you are going to be able to fix it is to implement some form of open access.

Thomas Carter was not a judge who broke apart a monopoly by fiat. Thomas Carter was an entrepreneur who wanted to bring an interesting product to market and was furious, mad as hell, to discover that he required permission to innovate. I am an entrepreneur, and I am mad as hell that I require permission to innovate in the wireless market. I don't have to go to the great companies that build our public highways and ask them for their views on what kind of cars that I can put on those roads. I don't have to ask ConEd for permission when I want to put a refrigerator on the electricity network. I don't have to ask Verizon, thanks be to Thomas Carter, for permission to attach a computer to their network or to launch a Web site. But for some reason I have never been able to understand, I have to ask permission of Verizon wireless to attach a computer or the computers that they now call phones to their wireless network, and I have to ask their permission to run applications and services on those phones. Worse, I have to ask the permission of my competitors, because they are competing with me to provide services to consumers.

There are three ways that you can fix this problem. The first is you can go on selling spectrum indefinitely, but unfortunately, it is a scarce national resource, and we are going to run out of it. I would be happy to purchase spectrum and launch a national network and so would my 14 colleagues in Wireless Founders Coalition for Innovation who wrote to the FCC on this issue a couple of weeks ago. But you don't have enough spectrum to sell us, and you aren't going to allow us to do that for the same reason that you are not going to allow us to dig up the roads and streets of America to lay 15 sets of cables to everybody's homes no matter what the consumer benefits might be.

So the second solution that you could take is regulation, and that means some form of open access, and by open access, it essentially is what Mr. Pickering said it is, the opportunity to attach any device to the network. It's the opportunity to run any service on the network, provided of course that no harm is caused to the network and that it is for a lawful purpose. And that is the solution that I recommend.

And the only other solution is competition, pure action of market forces. And I have to tell you, however, that despite the fact that as the CTIA and the FCC keep telling us, wireless sector is the most competitive telecommunications sector in this country, and that is unquestionably true, nevertheless, there are hundreds of interesting applications and services that are not getting in front of consumers because of the current structure of the market; and that is a problem that we can only address through regulation. And in my written testimony, I set out extensive examples of the services and applications that are not possible. They fall into four broad categories. First of all, there are applications and services that require the permission of all of the carriers in order for me to launch them. I gave the example of, say, an xPhone. Imagine a phone that worked across every network in the United States so that no matter where you were in the U.S. you could get coverage because the phone would automatically activate on whatever network offered the strongest signal. Now, it is actually technically easy to build such a phone, and Mr. Zipperstein just showed you one because Verizon is already selling it. But they have crippled that phone so that it won't work on any GSM networks in the United States. They sell it only to their customers who want to be able to use it in GSM networks abroad. And frankly, I don't blame him because even if he tried to do that, he would probably fall afoul of antitrust provisions if he tried to negotiate relationship with all of the U.S. networks in order to sell such a device, but I could sell such a device, and any consumer in the country—and remember 27 percent of consumers change carriers solely in order to get better coverage—27 percent of consumers would surely be interested in buying a device that worked across any network, and I could intermediate a relationship with all of the networks in order to ensure that they had a single billing relationship. That is a straightforward thing to do.

The second category—and remember, that is just one category of devices—the second category of applications and services are those that compete with the carriers' own initiatives, and there are hundreds of examples of those. I will give you a trivial one. Ringtones. Why are your kids' ringtones so expensive? It is not because there aren't people who don't want to sell them to you for less money, it is because the people who want to sell them to you for less money are not allowed to get onto the carriers' handsets because the carriers are supporting the price of those services.

Here is the third example. Legal risk. If I want to launch a service that has any legal risk associated with it whatsoever, it is highly unlikely to happen because the carriers have thrown out the baby with the common carrier bathwater. By no longer being regulated under the terms of title II, they no longer have any immunity for any of the services that they carry over networks, so they will take a very conservative approach.

I have plenty more to say, but I am sure I will have further opportunities to speak.

[The prepared statement of Mr. Devitt follows:]

Statement of Jason Devitt

I wish to thank the Subcommittee for their invitation to contribute to this important hearing.

My name is Jason Devitt and I am an entrepreneur. I have built and sold one successful small business and I recently started another. Regulations, in general, are a burden to me. Although I was born in Ireland, I have chosen to make America my home in part because this country offers entrepreneurs like me broad freedom to create new products and services, and great rewards for success. I am here to call for deregulation: the elimination of certain regulatory protections that the wireless carriers currently enjoy. I do not believe that the Federal Government ought to be shielding Verizon and AT&T from competition with me.

Last month, I was one of a group of fifteen successful entrepreneurs who signed a letter calling for Open Access rules to be applied to a portion of the spectrum in the forthcoming 700 MHz auction. The propagation characteristics of this frequency band have led some to call it 'beachfront property.' The auction represents the best chance we have for the foreseeable future to create new and much needed competition in broadband services. As I will explain, Open Access rules would ensure that Americans were no longer denied access to innovative new mobile products and services and familiar services at lower prices. But personally, I believe that Congress and the FCC should go much further, and consider applying Open Access rules to all our existing wireless networks.

Open Access means, quite simply, the freedom to innovate without permission: the freedom to attach any non-harmful device to the network, sometimes called the Carterfone principle, the freedom to run any application on that device and to access any content. The goal falls far short of so-called network neutrality. In wireless, the idea of equal treatment for every packet is a remote fantasy. We are often not allowed to launch our services in the first place.

Open Access is an unfamiliar term for a very familiar idea. The private companies who build and maintain our highways don't get to dictate what kind of car I drive. I don't have to ask Wal-Mart for permission to open a retail store next door to one of theirs. ConEd and PG&E can't limit my choice of vacuum cleaner, and I don't have to ask Verizon for permission to launch a web site. However, I have to ask Verizon Wireless for permission to sell a phone that runs on their network or an application that runs on their phones.

AT&T and T-Mobile are more liberal, but they claim the right to change their policies at any time, and since they control 80% of the distribution for their products and press the remaining 20% of retailers not to carry unapproved devices, there is little practical difference.

I am well aware of the investment that Verizon Wireless, AT&T, and other carriers have made in their respective networks, and I respect their right to recover that investment. I am happy to pay a toll, and I am happy to meet any safety standards they set out, provided that they hold their own equipment to the same standard. Ideally, if we couldn't come to terms, I'd build my own wireless network and compete with them. I am sure that my colleagues in the Wireless Founders Coalition for Innovation feel the same way. But there's a problem. There is not enough spectrum to support fifteen new nationwide wireless networks, so you won't let us build them, anymore than you would let us dig up the streets to lay fifteen new cables to every home in the land, regardless of the benefits to consumers.

If we cannot permit every entrepreneur to build his or her own network, there are still two ways to ensure that innovative new products and services get to market. One is to mandate some degree of Open Access so as to guarantee entrepreneurs access to existing networks. The other approach is to trust that competition between wireless carriers will obviate the need for regulation; surely there will always be at least one carrier willing to give an entrepreneur permission to innovate on their network?

As the FCC and the CTIA are forever pointing out, the cell phone market is the most competitive telecommunications market in the United States. Consumers often have six or seven providers to choose from. Nevertheless, there are hundreds of compelling wireless products and services that never get to market.

How do I know this? I've spent eight years working on applications and services for mobile and wireless devices. My first company, Vindigo, brought twenty different products to market, partnering with every major wireless carrier and many smaller carriers and MVNOs. As an entrepreneur-in-residence at a small venture capital firm that specializes in wireless data, I had the opportunity to review dozens of business plans from innovative startups. I explored a wide range of potential business models before starting my new company, Skydeck, and I spend a lot of time exchanging advice and ideas with other entrepreneurs in the wireless market. I believe that there are four broad categories of businesses that seldom or never get permission to launch, despite the number of competing carriers:

1. Devices or services that require the permission of *all* of the carriers to launch

Imagine a phone that worked across every wireless network in the US, switching to whatever network offered the best coverage in a given area. I call this idea the xPhone. Technically it's quite straightforward. A customer would need to have billing relationships with multiple carriers, but the xPhone provider could intermediate these for her. Since 27% of Americans who change carrier do so primarily to get better coverage, demand for an xPhone ought to be high, from salespeople to law enforcement. But it's not enough for one carrier to give permission to launch the xPhone; every major carrier would have to agree. And the carriers that compete on the basis of network coverage say no.

The same problem frustrates many novel messaging and community applications. Both sender and receiver must have the application, but they are not likely to be on the same network. A messaging application that works on only one carrier is worth very little, as US carriers learned themselves from trying to launch text messaging this way. Of course, it is theoretically possible to get the permission of all of the carriers to launch a new messaging application, but my point is that competition between carriers in this case is no help at all. If there are too few carriers they can extract monopoly rents; if there are too many the market is Balkanized.

Open Access would lead inevitably to the xPhone and enable many new messaging and community applications.

2. Devices or services that compete with the carriers' own initiatives

This is an obvious category, and the most obvious example of is Skype, an application banned by every US carrier. Other well-known examples include Verizon's blocking of all Bluetooth-based applications and services except for headsets, and AT&T's bar on dial-up networking applications.

A recent front page article in the Wall St Journal article ("A Fight Over What You Can Do On A Cellphone", 6/14/07) described the efforts of cellphone manufacturers, particularly RIM, to give away applications that every carrier in the market wishes to charge for. Most manufacturers are unwilling to alienate carriers by selling directly to customers, so customers are forced to go on paying.

Imagine a phone that warned customers on monthly contracts whenever they had exceeded their monthly allowance of minutes. Most carriers provide customers with a means of checking their balance and some will even send alerts by email, but what about a phone that nags you to stop making calls?

No carrier will launch such a phone, for the same reason that no gym will call you to ask why you haven't been coming in for a workout.

For me as a consumer, the most glaring example of market failure is that no major carrier will offer me a discount on a service plan in return for bringing my own phone to their network. To be sure, several carriers will allow me to activate my own phone. But they charge me the same rate as they do customers whose handset is being subsidized, and to add insult to injury, they will charge me an early termination fee if I quit, to recover the cost of the handset I never asked for.

Carriers could not offer such a plan without voluntarily adopting Carterfone. And though there may be a dozen competing providers in my home market, none of them appears willing to take that step.

3. Business models that expose the carrier to significant legal risk

In escaping regulation as common carriers, wireless carriers have foregone immunity that this brings. They clawed back some protection under the Communications Decency Act, and again under the DMCA. But brace yourselves. I suspect that the industry will be coming back to this Subcommittee year after year to seek regulatory immunity for many different kinds of mobile application and service - all in the name of deregulation of course. In the meantime, consumers can expect slow progress or no progress in location-based services (are carriers liable for invasions of privacy?), mobile commerce (will carriers be held liable for fraudulent transactions?), and free speech (are carriers to be regulated like broadcast networks or cable?). The carriers have no choice.

Obviously, startups have far greater appetite for legal risk than incumbent carriers.

4. Any device or service for which initial demand appears low

To me this is the most important category of all. Inevitably, carriers are not interested in devoting time and resources to devices or applications that they don't believe will be of interest to the majority of their tens of millions of customers. Innovators can turn to small carriers instead, but there are very few small carriers or MVNOs that are practical launching pads for truly novel services. And there are fewer every day: within the last month, Dobson was acquired by AT&T and Amp'd Mobile went bankrupt.

Why does this matter? Because almost every major innovation in the history of telecommunications looked like a lemon when it was first proposed. Members of Congress laughed at the idea of funding Morse's telegraph; one brought up a joke bill proposing to fund research into mesmerism instead. Western Union passed on the chance to buy Bell's telephone patents. The old AT&T turned down a contract to build and operate what we now call the Internet and also opted out of the mobile phone business when their consultants forecast that the global market for mobile phones in 2000 would be one million subscribers.

Name a class of mobile application or service launched by a US carrier that had not already been proven successful in a foreign market. This is an indictment of the whole industry.

Forcing entrepreneurs to seek permission to innovate in mobile services is killing powerful new ideas before you ever get to hear about them. Imagine the founder of Amazon having to persuade Sprint in 1995 that he could do a better job selling books online than Barnes & Noble. Imagine the founder of eBay trying to explain to a mid-level manager at Verizon that trading stamps, coins, and dolls online would be a good way to make money. Picture the founders of Google in 1999 persuading AT&T to let them launch another search engine. This is the daily reality for those who develop mobile applications, the "tarpit of misery, pain, and destruction" as one developer described it in Professor Tim Wu's paper on Cellular Carterfone.

If you believe that these services, from the telegraph to Google, have increased consumer welfare, then you will understand how Open Access might benefit innovators and entrepreneurs.

A Note On Network Safety

None of the devices and applications that I have described so far raise any serious concerns related to bandwidth consumption, security, or any other network management issues. Entrepreneurs have no desire to launch services that pose any risk to the wireless network. That would be suicidal. Their ideas are almost never rejected by the engineering department; they are rejected by the marketing department, for business reasons alone.

Carriers' objections to cellular Carterfone on the grounds of network safety would be more credible if they were not at the same time selling data cards that allow customers to connect any virus-ridden, malware-laden laptop in the world to the same vulnerable networks.

As I stated at the beginning, the fewer regulations the better. But why should the networks of the wireless carriers be treated differently from every other network – DSL, cable, even non-cellular wireless networks like WiFi – all of which are subject to Carterfone? In a free market, why should I need to ask carriers' permission to enter the market, especially when they are free to compete with me? Why can I not get access to networks that are built on public property – scarce wireless spectrum – that I am not allowed to purchase myself?

Finally, I would love to think that competition between carriers is sufficient to ensure that entrepreneurs like me will always be able to launch compelling new products and services. But as I have explained, it is not.

Once again, my thanks to the Subcommittee for their invitation and for the opportunity to present my thoughts.

Sincerely yours,

Jason Devitt

Mr. MARKEY. Thank you, Mr. Devitt, very much. Mr. Ed Evans. He is the chief executive officer of Stelera Wireless, a start-up wireless broadband company. He is also here representing the Board of Directors of the CTIA. Welcome, sir. Whenever you are ready, please begin.

STATEMENT OF EDWARD EVANS, CHIEF EXECUTIVE OFFICER, STELERA WIRELESS, OKLAHOMA CITY, OK

Mr. EVANS. Thank you, Mr. Chairman, Ranking Member Upton, distinguished members of the House subcommittee. Thank you for inviting me to discuss wireless innovation and consumer protection today. My name is Ed Evans, and I am the founder and CEO of Stelera Wireless.

The emergence of Stelera Wireless provides fresh evidence that the current light-touch regulatory environment is the best means of fostering innovation and competition in the wireless industry. The choices made possible by this innovation and competition protect consumers far more effectively than any regulations could. I am here today to urge you to do two things, to avoid calls to impose particular business models on the wireless industry as well as to extend the well-established benefits of the national wireless framework to encompass all the terms and conditions of wireless service and not just rates and entry.

Let me address both of these issues, but first, since you may not be familiar with Stelera Wireless, allow me to provide you with a little background. Stelera is a start-up company. We were formed in 2006 to participate in the FCC's AWS auction. That auction concluded last September with winning bidders paying almost $14 billion for the rights to the AWS spectrum. We were a successful bidder. The towns in our 42 markets range in size from just a few hundred, places like Umatilla, OR, to almost 200,000 people in Lubbock, TX. Three-fourths of the towns in our footprint have a population of less than 10,000 people. In some of those towns, Stelera will be the first company to provide any type of broadband service. Our plan is to provide competitively priced broadband wireless services both on a month-to-month basis and under longer term contracts. We will be using third generation wireless technology with transmission speeds of up to 6 megabits per second. While we plan to provide a voice over IP solutions competitive offering in late 2008, we will allow the consumer to choose another voice over IP provider if they so choose. We will not restrict customers from accessing any Web site or running any applications, although we will monitor total usage and reserve the right to charge a premium or take action against abusive subscribers. This is critical in a wireless network, since one subscriber abusing the network can adversely affect many other subscribers on the same network.

Stelera's experience in deploying a new broadband service gives us a valuable perspective on how the Government can best promote wireless innovation.

Our conclusion is simple and straightforward. Congress and the FCC should continue to rely on market forces instead of prescriptive regulation to determine how new wireless services are deployed. The ability to invest with confidence allows us to give consumers a wider choice of wireless services and providers. This competition and choice protects consumers far better than prescriptive regulations that are subject to interpretation, misrepresentation, and manipulation. Whether you call it Carterfone or open access, command and control regulatory mandates will harm rather than promote the interest of consumers. The decision to allow market forces to drive wireless innovation has its roots in this committee's determination, enacted by Congress in 1993, to establish a national deregulatory framework for wireless services. This market-proven approach abandoned the notion that wireless providers must be regulated as if they were monopoly utilities, a wise policy choice that has only been confirmed with the passage of time.

Wireless consumers today have a choice among numerous national, regional, and local carriers offering a broad range of rates and plans to suit every need and every budget. Free from State rate and entry regulation, wireless providers can structure their products and plans without regard to State boundaries. The result has been aggressive competition for price, features, and customer service. Notwithstanding the obvious benefits of Congress's 1993 decision, national treatment does not extend to all terms and conditions of wireless offerings. Seeking to exploit this gap, some States have proposed wireless-specific rules and regulations that could put at risk the national framework that has fostered a vibrant, competitive wireless marketplace. Given that today's wireless industry affords consumers the ultimate consumer protection of competition and choice, there is simply no need for a new layer of rules, especially not mandates that vary from State to State. Congress should act now to ensure that the benefits of the uniform deregulatory wireless framework originated by this committee 14 years ago are not compromised by aggressive and unneeded State regulation. While the FCC has already declared wireless broadband services to be interstate information services, clarity on this point will establish a common framework for all wireless services and help avoid disputes going forward.

Thank you again for inviting me today.

[The prepared statement of Mr. Evans follows:]

STATEMENT OF G. EDWARD EVANS
FOUNDER AND CEO
STELERA WIRELESS, LLC

Before the

SUBCOMMITTEE ON TELECOMMUNICATIONS AND THE INTERNET
COMMITTEE ON ENERGY AND COMMERCE

on

WIRELESS INNOVATION AND CONSUMER PROTECTION

July 11, 2007

Mr. Chairman and Members of the Subcommittee, thank you for the opportunity to appear before you this morning to discuss wireless innovation and consumer protection. My name is Ed Evans and I am the founder and CEO of Stelera Wireless, a start-up company now constructing broadband wireless markets in 42 primarily rural areas of the country, using spectrum we won in last year's advanced wireless services auction. I am also a member of the Board of Directors of CTIA-The Wireless Association®.

The emergence of Stelera Wireless provides fresh evidence that the current light-touch regulatory environment, where business models are set by entrepreneurs rather than the government, is the best means of fostering innovation and competition in the wireless industry. The choices made possible by this innovation and competition protect consumers far more effectively than any regulations could. I would respectfully suggest that you avoid calls to impose particular business models on the wireless industry and that you extend the well-established benefits of the national wireless framework to encompass all the terms and conditions of wireless service, and not just rates and entry.

Let me address each of these issues in turn.

Since you may not be familiar with Stelera Wireless, allow me to provide a little background. Stelera is a start-up company formed in 2006 to participate in the FCC's advanced wireless services (AWS) auction. As you know, that auction concluded last September, with winning bidders paying almost $14 billion for the rights to the AWS spectrum. I am pleased to say that Stelera succeeded in winning 42 licenses, mostly in rural markets. Having spent millions to acquire these licenses, we are currently investing additional capital to build out our network.

The towns in our markets range in size from Sunnyslope, Washington (population 2,521) to Lubbock, Texas (population 199,000). Three-fourths of the towns in our footprint have a population of less than 10,000. In some of those towns, Stelera will be the first company to offer broadband service because technology, terrain, or lack of density has made it infeasible to provide wireline broadband access.

Stelera's business plan is to use this spectrum to provide competitively priced broadband wireless services in our markets, both on a month-to-month basis and under longer term contracts. We will be using third generation (3G) wireless technology called High-Speed Uplink Packet Access (HSUPA), which provides transmission speeds of up to 6 megabits per second. We plan to allow VoIP service through our network to any provider. We also plan to provide a VoIP solution as a competitive offering in late 2008. We will allow the consumer to choose another VoIP provider or to choose our offering once available. We will not restrict customers from accessing any website or running any applications, although of course we will monitor total usage and reserve the right to charge a premium or take action against abusive subscribers. This is critical in a wireless network, since one subscriber abusing the network can adversely affect many other subscribers.

Stelera's experience in actually deploying a new broadband service gives us a valuable perspective on how the government can best promote wireless innovation. Our conclusion is simple and straightforward: Congress and the FCC should continue to rely on market forces instead of prescriptive regulation to determine how new wireless services are deployed. Though Stelera is a relatively small enterprise, we were able to execute on our business strategy and are responding to marketplace demands to provide new wireless broadband service in many areas that currently lack such service. No amount of prescriptive regulation can work better than market forces at identifying marketplace needs and facilitating the flow of investment capital to meet those needs.

The ability to invest with confidence promotes a competitive marketplace that gives consumers a wide choice of wireless services and providers. This competition and choice protects consumers far better than prescriptive regulations that are subject to interpretation, misinterpretation, and manipulation. In particular, I would respectfully urge you to reject calls to inject the government into the wireless marketplace through wholesale-only mandates, "open access" requirements, and geographic buildout requirements. These command-and-control regulatory proposals will undermine innovation and competition, harming rather than promoting the interests of consumers.

There is no assurance, for instance, that a wholesale-only business model could succeed. But setting that aside, government should, as a general matter, refrain from dictating licensees' business plans. If the wholesale model has merit, surely some entrepreneur will step forward and put it into effect.

"Open access" proposals likewise represent unwarranted interference in the deployment of wireless networks. As a threshold matter, the proposals fail to acknowledge that an open access obligation is simply unnecessary in the competitive wireless marketplace. Indeed, wireless carriers are free to experiment with open access models under today's flexible service rules. As a mandate, however, whether we are talking about Frontline's or Skype's version of this ill-conceived policy, "open access" would be a disaster. Far from opening anything, it will in fact close down investment and innovation in new network infrastructure and innovative services. Imposing such requirements on wireless providers threatens their ability to configure their own networks to best respond to consumer demand and marketplace changes. Open access regimes would expose wireless networks to the prospect of harmful interference and degraded performance, prevent carrier compliance with important social policy obligations such as E-911, and enhance the risk of network security threats.

Finally, a geographic buildout requirement may have some superficial appeal as a means of bringing wireless service to rural areas, but it will in fact have the opposite effect. A build-out requirement based on geography rather than population could prevent a licensee from focusing resources on places where demand and need are greatest, leading to lower quality service as the licensee is forced to spread those resources across a broader area. Being forced to build to meet arbitrary deadlines might also force carriers to make decisions to purchase equipment based on what is available now, rather than on the basis of what might be available in the near future. And forcing a carrier to return spectrum that it has every intention of using in the future will harm the carrier without helping consumers. As Commissioner Copps has observed, "[W]e also need to make sure that we do not unfairly punish licensees -- especially in rural areas -- who cannot engage in aggressive build-out for perfectly good economic reasons."

The successful policy of relying on market forces rather than government involvement has its roots in this Committee's determination, enacted by Congress in 1993, to establish a national deregulatory framework for wireless services. This market-driven approach wisely abandoned the presumption that wireless providers must be regulated as if they were monopoly utilities, a wise policy choice that has only been confirmed with the passage of time. Moreover, you concluded, correctly, that a *national* policy was most appropriate for mobile services that "by their nature, operate without regard to state lines as an integral part of the national telecommunications infrastructure."[1/]

Wireless consumers today have a choice among numerous national, regional, and local carriers offering a broad range of rates and plans to suit every need and budget. Freed from state rate and entry regulation, wireless providers can structure their products and plans without regard to state boundaries. The result has been aggressive competition on price, features, and customer service. One need only leaf through a major newspaper and see the numerous competing wireless advertisements to confirm that competition is the hallmark of the wireless industry. And the fact that there is a single uniform policy for the nation means that consumers enjoy choice, convenience, and competition throughout the country.

Notwithstanding the obvious benefits of Congress's national deregulatory framework for wireless, it does not extend to all of the terms and conditions of wireless offerings. Seeking to exploit this gap, some states have proposed wireless-specific rules and regulations that could put at risk the national framework that has fostered today vibrant wireless marketplace. Many of these proposals would micromanage the wireless business, dictating the appearance and content of consumers' wireless bills down to the level of prescribing the size of the type in newspaper advertisements, for instance, steeply increase carrier overhead—and as a result, the rates charged

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1/ H. REP. NO. 103-111, at 260 (1993).

to customers—by negating the efficiencies of a nationwide carrier's unified billing and collections efforts.

While the state regulators and legislators behind these proposals assert that consumers need new government mandates, the facts show otherwise. Even with the explosive growth in wireless, consumer complaints as reported by the FCC in its most recent quarterly survey represent less than two-thousandths of one percent – 0.00197 percent (20 per million subscribers) -- out of a customer base of 233 million wireless users, and the number of complaints has been declining on year-to-year basis.

Consumer satisfaction with wireless is due in no small part to carriers' implementation of the CTIA Consumer Code ("CTIA Code"), which was developed by the industry to provide consumers with information to help them make informed choices when selecting wireless service, to help ensure that consumers understand their wireless service and rate plans, and to continue to provide wireless service that meets consumers' needs. The Code's comprehensive provisions require carriers to supply accurate descriptions of charges on bills and the separate service charges from taxes and fees remitted to the government. Signatories to the Code must give customers a penalty-free cancellation period, and disclose at the point of sale all material rates, terms, and conditions, including the amount or range of any fees or surcharges that are collected and retained by the carrier.

My point is this: today's wireless industry affords consumers the ultimate "consumer protection" of competition and choice. There is simply no need for a new layer of rules and regulations, particularly not mandates that vary from state to state and region to region. Congress should act now to ensure that the benefits of the uniform deregulatory wireless framework originated by this Committee 14 years ago are not compromised by aggressive and unneeded state regulation. While the FCC has already declared wireless broadband services to be an interstate information service, clarity on this point will establish a common framework for all wireless services and help us avoid disputes going forward.

Thank you again for inviting me today. I would be happy to answer any questions.

Mr. MARKEY. The gentleman's time has expired. And now to our final witness, Mr. Chris Murray. Mr. Murray is the senior counsel at the Consumers Union, and he testifies today on behalf of Consumers Union, the Consumer Federation of America, and Free Press, thank you, Mr. Murray.

STATEMENT OF CHRIS MURRAY, SENIOR COUNSEL, CONSUMERS UNION

Mr. MURRAY. Happy birthday, Mr. Chairman. Good morning Ranking Member Upton, Vice Chairman Doyle, and other esteemed members of the committee. I do appreciate the opportunity to testify again for you today.

I am here because I am concerned that the wireless industry is gouging consumers with hefty early termination fees and impeding innovation by stopping applications and devices from reaching consumers. I would like to associate my remarks with the panelists that share these concerns, and I really want to underscore some things that are going on in this marketplace. First of all, let us remind ourselves briefly of what this market really looks like. We do have two dominant providers that have more than half the market for wireless services, and those two providers are also the dominant landline phone providers in their service territory. They are going to have more than 90 percent of the customers in their service territories. They are also the broadband providers in that area. They have the leading brand recognition in the service territories, and there is nobody else in their territory that can offer that bundle. So while this is a more competitive market than say landline, which is virtually a monopoly, and broadband, where we have got two choices, it still doesn't preclude tight oligopoly behavior from occurring in this marketplace, and Economics 101 tells us a little bit about what can happen in those situations.

First let me talk briefly about early termination fees. These are ubiquitous, with carriers charging $175, $200, as much as $240 if a customer wants to leave before their often 2-year contract is up. While Verizon has adopted a prorating policy, which I think is a good step, the other carriers have not even taken this minimal pro-consumer step. ETFs are a pocketbook issue, but they also affect the preemption discussion that we have taking place, and the reason for that is because if you have got any kind of a suit against the wireless carriers, whether it is because their maps weren't accurate, whether it was because they didn't disclose fully the terms of service, the damages in every instance are going to involve the early termination fee. So if we preempt those early termination fees, it is not—from having some sort of State purview, we are not just talking about just the early termination fee. We are talking about stopping policing of a lot of anti-consumer behavior.

Some examples of problematic ETFs is if let us say I locked into the family share plan where I can add an additional member of my family for $10. If I have got a family of five with five lines, if I want to leave, it is going to cost me nearly $1,000 in some instances. Would we expect competition to work very well in that market? I don't think we should. The carriers are also extending early termination fees for any change in service plan, whether it benefits the carrier or not. In other words, if I increase my bucket of minutes, they are actually going to lock me into another 2-year contract. That is astounding to me. The justifications that we hear for early termination fees first of all is subsidy, subsidy, subsidy. I think the release of the iPhone shows this to be transparently false. Consumers are not getting one dime of subsidy for that device, yet they still get locked into a 2-year contract with a $175 termination fee.

Having lost that fig leaf of subsidies, I then hear them talking about other costs associated such as the cost of maintaining a network and the cost of acquiring consumers. Well, welcome to capitalism. These are the same costs borne by every other company in America, yet somehow they manage to recover them from the rate base. The other reason I am skeptical this is just purely about consumer welfare is because I see applications that they are stopping from reaching consumers. BlackBerry created a mapping program that they wanted to give people for free. AT&T turned around and said no because we have got a program that we want to charge them $10 for. I see the BlackBerry 8800 that Mr. Zipperstein noted. That is a phone that does both CDMA and GSM; but if I take that to Europe, it is not going to work. If I take that to another GSM carrier, it is not going to work. The manufacturer designed this phone with a chip set that works on all these different networks. They have actually taken affirmative steps to disable those electronics. This is outrageous to me. I am paying $600 for a phone, and they have gone out of their way to make it not work because they want to reach into my pocket again to charge me for an expensive international plan.

Why is it that we see better choices in Europe and in Asia for consumers? I submit that it is precisely because they have not allowed manufacturers to lock down these devices.

I have three challenges for the industry today. Number 1, stop charging consumers undue early termination fees. I can get out of a lease for an apartment or a home with one month's rent, yet I get about the cost of a half-a-year's service to end my wireless contract. Number 2, stop crippling these mobile phones. If I spend $600, it is reasonable to expect that that device works exactly as it should. And third, stop preventing new applications from reaching consumers.

I will end there since my time is up. I appreciate the time today.

[The prepared statement of Mr. Murray follows:]

Consumers Union
Nonprofit Publisher of Consumer Reports

Consumer Federation of America

freepress

Testimony of

Chris Murray
Senior Counsel
Consumers Union

On behalf of

Consumers Union, Consumer Federation of America, and Free Press

Regarding

"Wireless Innovation and Consumer Protection"

Before the

U.S. House of Representatives Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce

On

July 11, 2007

Chairman Markey, Ranking Member Upton, Vice Chairman Doyle and esteemed members of the Committee, thank you for the opportunity to testify again before you on behalf of Consumers Union[1] (non-profit publisher of Consumer Reports), Free Press, and the Consumer Federation of America.

The wireless industry today is gouging consumers with early termination Fees[2] and impeding innovation by preventing valuable new applications from reaching consumers. We urge this Committee to consider whether some legislative action is necessary to address these issues and help level the playing field for consumers.

Early Termination Fees are ubiquitous in the wireless industry, with some carriers charging as much as $200 if a customer would like to leave before their (generally two-year) contract is completed. While Verizon has adopted a policy of pro-rating these fees, the other carriers have not even taken this minimal pro-consumer step.

Let me give a few brief examples of how wireless carriers are applying Early Termination Fees. Consumers who buy a family share plan from a wireless company are in for a rude shock if they try to terminate their plan, as each family member will be liable for the full Early Termination Fee. For instance, let's say a family of five wanted to leave for

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[1] Consumers Union is a nonprofit membership organization chartered in 1936 under the laws of the State of New York to provide consumers with information, education and counsel about goods, services, health, and personal finance. Consumers Union's income is solely derived from the sale of *Consumer Reports*, its other publications and from noncommercial contributions, grants and fees. In addition to reports on Consumers Union's own product testing, *Consumer Reports* (with approximately 4.5 million paid circulation) regularly carries articles on health, product safety, marketplace economics and legislative, judicial and regulatory actions that affect consumer welfare. Consumers Union's publications carry no advertising and receive no commercial support.

[2] In fact, courts in California and elsewhere have found these Early Termination Fees to be illegal in a number of class action lawsuits (to be more precise, the fees were found to be unconscionable "penalties," rather than "damages" which are acceptable for them to charge under the Uniform Commercial Code). The wireless industry wants the FCC and Congress to preempt these lawsuits. But why should the FCC or Congress provide protection when courts are finding that certain carriers in the wireless industry are breaking the law with improper contracts? The object lesson this would provide the industry is that the solution to anti-consumer behavior is not to remedy the behavior, but instead to go seek protection from policymakers.

another carrier with better service. That family could face nearly $1000 in termination penalties if they haven't completed their two-year contract. This is certainly a strong deterrent to competition.

Another problematic practice is when carriers extend contracts for any change in service plan—whether the change benefits the wireless carrier or not. In other words, if I am a wireless customer and I decide to increase my bucket of minutes, my carrier may automatically extend my contract for another year or two, and saddle me with another Early Termination Fee if I decide to leave before the contract is up.

The wireless industry will claim that their reason for charging Early Termination Fees is because they offer substantial subsidies or discounts to consumers. AT&T's recent release of the iPhone illustrates why this is transparently false. Consumers who purchase the $600 iPhone—for which they are not likely receiving one dime of subsidy—will still face a penalty of as much as $175 to end a two-year contract early.

Furthermore, wireless carriers simply do not offer the option to consumers of paying full retail for their phone in order to avoid getting locked into a multi-year contract. So clearly, "subsidy" is no excuse for these Early Termination Fees.

Having lost the "subsidy" fig leaf, the wireless industry then turns to other costs as the reason they must charge the penalties, such as the cost of customer acquisition and the cost of maintaining a network. These are typical costs borne by many other businesses in America, yet other businesses manage to cover such costs from their rate base. Instead, the wireless industry chooses to penalize consumers who may want to change carriers for better service or lower prices. This is nothing more complicated than throwing gravel in the gears of competition.

The wireless industry also professes that Early Termination Fees are in the best interests of consumers, because it helps keep costs down for service as well as for handsets. But we should be skeptical of the industry's claims that consumer welfare is their primary motive—as a recent Wall Street Journal article[3] notes, handset manufacturers have been trying to offer consumers services for free on new handsets, but network operators such as AT&T and Verizon have said "no" to those free services because they compete with services that the wireless carriers want to charge for.

According to the article, RIM (which manufactures the Blackberry) wanted to offer a free mapping service to customers who buy the Blackberry, but AT&T said no, because they had a service that they wanted to charge users $10 a month for.

Another example is Verizon's Worldphone by RIM, which has the capability built in to work on cellular networks in Europe, as well as to work on other GSM networks here in the States. Yet Verizon locks down the device so that they can charge users extra fees for the privilege of phones working as they were actually designed to work. That is, the GSM capability built into the $600 handset simply won't work unless a user pays Verizon for a more expensive "international plan." As a user who does a lot of international travel, I don't need their international service plan—I just need my phone to work as it was designed.

Yet another instance of troubling conduct is the slow rollout of mobile phones that also do Wi-Fi—these phones allow consumers to use the Internet when they are near a Wi-Fi Internet "Hotspot." Most U.S. carriers are not making these phones available to consumers, although T-Mobile is currently offering these handsets. But as the Chairman of

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[3] Vascellaro, Jessica. *"Air War: A Fight Over What You Can Do on a Cell Phone – Handset Makers Push Free Features for Which the Carriers Want to Charge."* Wall Street Journal, June 14, 2007.

the FCC noted in a recent USA Today article,[4] "[i]nternationally, Wi-Fi handsets have been available for some time, . . . but they are just beginning to roll out here.. . . I am concerned that we are seeing some innovations being rolled out more slowly here than we are in other parts of the world."

Indeed, in Europe and Asia, wireless consumers have better choices. I can buy a cell phone in London, and simply swap out a small card (called a SIM card) in the back of the phone and it works across any other European network. This decoupling of networks and handsets has created a vibrant European handset market, where manufacturers innovate relentlessly to keep customers loyal. In stark contrast, the U.S. handset market lags European and Asian markets, precisely because wireless operators have the power to dictate which phones will interoperate with their networks, keeping out the competition.

Instead of innovating, the wireless industry has become a cozy cartel of a few dominant providers with limited device offerings. Instead of facing robust competition, these carriers are charging consumers unconscionable Early Termination Fees and deterring consumers from making real choices in the marketplace.

Today I would like to issue three broad challenges to the wireless industry:

1. **Stop charging consumers undue Early Termination Fees**. Early Termination Fees should be eliminated, or no more than the cost of one month's service. I can get out of a lease for a home or apartment with one month's rent—why should I be penalized at the cost of nearly half a year's service to terminate a wireless contract?
2. **Stop crippling mobile phones.** Consumers who pay hundreds of dollars for a new phone should fully expect that phone to do all the things the manufacturer designed it

[4] Cauley, Leslie. "*New Rules Could Rock Wireless World: Consumers, not carriers, may get to choose devices.*" USA Today, (July 10, 2007).

to do. Network operators who lock down the functionality of mobile phones to better suit their business interests should be scrutinized by the FCC and Congress.

3. **Stop preventing new applications from reaching consumers.** Wireless carriers are locking out competitive applications because they don't want "revenue leakage." This kind of anti-innovation protectionism flies in the face of a century of open communications policymaking.

Wireless Internet services will increasingly become the way that consumers connect to the Internet. If we allow these blatantly anti-consumer, anti-innovation practices to continue, we should expect our international broadband rankings to continue to slide, innovation to be less robust, and our mobile phone markets to continue to lag behind Europe and Asia.

In conclusion, I'll note that the FCC is getting ready to auction off the 700 MHz spectrum, and is rumored to be considering auction rules that would require some degree of openness for devices and applications. This is a positive development and we would encourage the agency to apply that openness not just to a small part of the 700 MHz spectrum. Without open access to the full range of wireless services and devices, consumers will continue to face unfair charges for service modification or termination, inability to use innovative applications, devices that have been hobbled to minimize competition, and other troublesome practices currently used by the dominant cell phone and broadband providers.

At the very least, failing broad openness across 700 MHz, the FCC and Congress need to act to make it easier and less costly for consumers to switch to cell phone providers who offer lower prices and better service.

Mr. Chairman, I'm grateful for the opportunity to testify before your Subcommittee today. Thank you.

Mr. MARKEY. The gentleman's time has expired, and all time for opening statements from the witnesses has expired, and we will now turn to questions from the subcommittee members, and the Chair will recognize himself.

Mr. Wu, you spend $500 for an iPhone, but the problem with the iPhone is that the iPhone with AT&T is kind of a Hotel California service. You can check out any time you like but you can never leave. You are stuck with your iPhone forever, and you can't take it anywhere. And that it seems to me is the heart of this problem, and you pointed to the fact when people buy a television set for $500, if they want to switch from service to service, they can do so. It is their television set. Can you just take that point and elaborate on it a little bit more so the members can understand how tied these consumers are? Even if they are not complaining, sometimes they don't understand that there are other options. People were very happy with their black rotary dial phone. I am sure there weren't a lot of people calling in because they just thought that they were stuck with it for the rest of their lives. Once they had other options, they went to them en masse.

Mr. WU. I think that is exactly right, Mr. Chairman. It is just unusual. This industry, there is something strange about this industry in the sense that even the basic rules of personal property of Americans owning what they buy seem to be suspended in this industry. That is why I don't know if it is iPhone or iPhoney. As you said, televisions, Americans spend a lot of money on televisions and don't expect when they switch services the television stops working. If you spend a lot of money on a toaster or refrigerator and suddenly you decide you want to switch to ConEd or Potomac Power or something, it would be outrageous if suddenly your refrigerator stopped working or died or wasn't allowed to work on more than one network. You have cars that could only drive on some roads. It would be very unusual. There is something strange about this industry.

Now, this is a Government-created industry in a lot of ways. It is reliant on public spectrum, and it was born of public spectrum, and I think that is one of the major reasons why we have such a strange state of affairs where personal property is not transferable or usable with more than one service provider.

Mr. MARKEY. All right. Let me turn to Mr. Devitt. Let us go to this question of innovation. Let us turn to this area, where the United States should be No. 1 looking over their shoulders at Nos. 2 and 3 in the world in this area, these wireless applications. Talk to us about what you think could happen if entrepreneurs knew that they could get their services carried and that consumers could have access to them.

Mr. DEVITT. The challenge we face in answering that question is what former Secretary of Defense Rumsfeld described as unknown unknowns. We don't know what we don't know about the applications that might be unleashed if entrepreneurs had the freedom to innovate. We could only argue by analogy, and I would say imagine what it would have been like in 1995 if Jeff Bezos had to persuade a mid-level manager at Sprint that he could do a better job of selling books online than Barnes & Noble could. Or what it would have been like if the founder of eBay had to persuade Verizon that selling stamps and coins and dolls online could actually make both of them a lot of money. Or what it would have been like if the founders of Google in 1999 had to persuade the telcos that it was time to launch yet another search engine. This is the daily reality of life for those of us who are trying to innovate in the wireless space, and it is created by this inability to innovate without asking permission.

With regard to the device market, if I wanted to bring an interesting device to the U.S. market or even bring a Japanese device to the U.S. market, theoretically, I could build a GSM handset and sell it directly to consumers, but the reality is that because AT&T and T-Mobile, the GSM providers who do allow consumers to put foreign devices on their network, claim that this is simply a policy that they could change at any time, no device manufacturer is going to take the risk of coming out with a device that actually challenges their business model because AT&T Mobile could simply block that device overnight. So that is why we don't see innovative ideas. That is why you don't see a flurry of entrepreneurs coming to you saying we can't get on the market, because a Thomas Carter is very rare. A Thomas Carter has to be a person who is smart enough to come up with a really compelling idea and dumb enough to try and execute it in this market given the power of the carriers and then crazy enough to try and sue somebody over it. And those people don't come up very often because we have got plenty of smart people in the Valley, but most of the ones who are dumb enough to try and do something in the wireless market get blocked in the VC stage because the VCs are smart enough not to invest in them; and so far we haven't seen anybody else come through who is crazy enough to sue.

Mr. MARKEY. Well, at least we have somebody crazy enough to testify before our committee, and we thank you for doing that.

Mr. DEVITT. Thank you.

Mr. MARKEY. And through us, I think you are talking to the Federal Communications Commission as they are deliberating, because ultimately it was the Federal Communications Commission, not Mr. Carter, and that takes courage itself in an atmosphere that is created where competition and the potential of new devices are then recognized as a valuable goal for public policymakers. Thank you for being here, Mr. Devitt.

Let me turn now and recognize the ranking member, Mr. Upton.

Mr. UPTON. Thank you, Mr. Chairman. And for those in the audience, we have a series of votes on the House floor. I do have a couple questions before I need to skip over and vote. Mr. Verveer, it is my understanding that nearly a million of these iPhones have been sold already literally in the first 2 weeks of their offering, and it is my understanding that nearly 400,000 of those million or so actually switched carriers from one of the competition to what is available now to get the new exciting—did you wait in line to get that phone, by the way? Your iPhone, did you wait in line? I was in Chicago when they came out, and the line was blocks long to get in.

Mr. MARKEY. Actually, Mrs. Capps asked what is the point of having this hearing today, and it is actually just to hint to my wife as to what I do want for my birthday.

Mr. UPTON. So it is not really yours? That iPhone is not really yours yet, is that what you are saying?

Mr. MARKEY. It is a hint.

Mr. UPTON. All right. Well, anyway, that many folks are actually switching. Doesn't this mean that in fact other carriers who lost their market share, aren't they going to come back with some competition that is going to bring people there?

Mr. VERVEER. I think that is exactly right. That is exactly what we would anticipate, that the normal thrust and parry that one sees in and among competitive firms is going to continue to produce the kinds of things that consumers want, and the iPhone obviously has attracted an enormous amount of attention and consumer interest and as you suggest has caused some people to change from their prior carriers to AT&T. No doubt those carriers and the others in the business are going to be very anxious to come forward with innovative products of their own that people are going to want. And that process is one that has brought us to what I think is a very good set of circumstances today, and it is one I think we should continue to rely on.

Mr. UPTON. And Mr. Zipperstein, I know that you can't comment on proprietary information, but wouldn't you agree? I mean, you have got to have something that is coming soon, right?

Mr. ZIPPERSTEIN. Absolutely. And I again raise the example of the Motorola RAZR. After the RAZR came out——

Mr. UPTON. I waited until they were $49.95. I couldn't believe it. I said, son, we are going there.

Mr. ZIPPERSTEIN. Other manufacturers, LG, Samsung, Nokia, put their designers to work to build a better RAZR; and they all came out with competing products before long that operated on different networks, CDMA, GSM. The market really addressed that problem in a very, very quick and efficient way.

Mr. UPTON. I am running out of time because I am watching the clock here on the little TV screen. The comment has been made about different networks and being able to have devices that work on all of them. How much would that add to the cost to the consumer? I was in Europe not too long ago, and I made sure that in fact my BlackBerry did work in Europe; but I know that my previous one did not work there. In other words, there was an added cost. What would the added cost be to some of these devices if they had to work on every network that is out there for the consumer?

Mr. ZIPPERSTEIN. You would definitely see higher priced devices. You would see as I mentioned with respect to WiFi devices that may see degraded battery life. You would also see the FCC being concerned about whether devices would be GPS compliant, whether they could work to receive E911 Phase II connectivity at the PSAPs, whether they would meet the FCC's hearing aid compatibility requirements, whether they would meet the FCC's RF, radio frequency, emissions requirements also.

Mr. UPTON. Thank you.

Mr. MARKEY. The gentleman's time has expired. Again, as the gentleman just noted, there are four roll calls on the House floor. It should take about a half-an-hour. There is intense interest in this subject material, so I think you are going to have a lot of members coming back to ask you questions. At this point the subcommittee stands in recess.

[Recess]

Mrs. CAPPS [presiding]. All right. You can tell I am doing this in part because I am sitting way down at the bottom end. By getting here, running over very fast after the last vote, I will be able to ask my questions first and move onto something else I need to do now, and I have already cleared with my colleague from Texas. He knows what I am doing, and it is OK with him. He has got seniority over me on this committee.

But I have found this to be such an informative hearing and am thanking my chairman for gathering us all together.

I am going to start with Mr. Verveer with a question for you. I want to ask a lot of questions. I have 8 minutes or now less than that, but I want to cover as much territory as I can. Your testimony today argues that the wireless market is very competitive in imposing open-access requirements, and you consider it to be similar to the Carterfone decision, that a decision imposing open-access requirements would be a mistake if we did something similar to the Carterfone. Would you briefly describe what parallels and differences you see, Mr. Verveer, you were there then, between today's wireless market and the telephone market of 1968?

Mr. VERVEER. Yes, I would be pleased to do that. In 1968, the telephone industry was dominated by a single company that was a thoroughgoing monopoly. The old Bell system was integrated between and among local telephone service, long distance service, and telecommunications equipment manufacturers. It was also regulated in a particular way involving rate of return regulation which it turns out creates a well-known set of incentives that involve again as it turns out—it provides them with rational incentives to discriminate even if the discrimination involves less use of the network over which they preside. In other words, they had rational economic reasons to refuse the deal.

Mrs. CAPPS. Could you get to the contrast really quickly because I want to move to some other issues, too.

Mr. VERVEER. That is obviously very different from the world today of wireless.

Mrs. CAPPS. Right.

Mr. VERVEER. There are numerous wireless carriers, and they are not subject to rate of return regulation.

Mrs. CAPPS. So you think there is no monopoly today. And Professor Wu, I think you might have a little different opinion. I want you to——

Mr. WU. I think that things don't really change that much in telecommunications markets. They have a well-known tendency to go towards monopoly, and that is exactly what we have seen over the last 10 years. This is a new market, and we started with a lot of companies. We are down to four, two dominant, and it is not surprising. It is economics.

Mrs. CAPPS. Right.

Mr. WU. It is more efficient to have a single company.

Mrs. CAPPS. So even though we are not there yet, you envision us getting more toward a monopoly?

Mr. WU. Well, that is the direction we are going.

Mrs. CAPPS. A little bit different tack on that, Mr. Zipperstein. As you know, Vodafone, the world's largest wireless phone company, owns almost half of Verizon Wireless. And in Europe, where Vodafone is particularly strong, many phones have functionality that has come to the United States very slowly, like Bluetooth capability and call timers. Vodafone in Britain and Verizon Wireless in the U.S. offer many of the same models of handsets. Do you think Verizon Wireless offers fewer features on any of these handsets than Vodafone does?

Mr. ZIPPERSTEIN. No.

Mrs. CAPPS. They don't?

Mr. ZIPPERSTEIN. We offer different features than Vodafone does in Europe.

Mrs. CAPPS. Would you say that it is identical, the service here, than Europe?

Mr. ZIPPERSTEIN. No, it is not identical. The features are different, the networks operate differently there. The service providers there offer a different range of options to customers, some of which we have here and some of which we don't. Some of the offerings that we have here are not as available in Europe.

Mrs. CAPPS. So there are differences, and we have heard other people make the statement that it is a little difficult to go—so many people travel so frequently, and it is still somewhat of a hang-up. What do you think is making the difference?

Mr. ZIPPERSTEIN. Well, certainly the BlackBerry device I showed earlier is a device that we deploy to respond to demand from our customers to be able to use a BlackBerry if they go to London or Paris on vacation. Also we offer two regular cell phones that work here and in Europe as well.

Mrs. CAPPS. OK. Thank you. Well, are there particular features that we don't have here that they do have in Europe?

Mr. ZIPPERSTEIN. I am not fully familiar with all of the offerings that the European carriers have.

Mrs. CAPPS. Maybe you would get back to me in writing with some of those things because I want to now ask Mr. Devitt, and then if there is time, Mr. Wu, I will get back to you to comment on the effect of open access on innovation and maybe even finish up this one description about Vodafone.

Mr. DEVITT. Thanks for the question. Let me put it this way. There are I think 30 devices that I can purchase today to use on Verizon Wireless's network. There are approximately 800 devices that I can purchase to use on Vodafone's network. I would call that a significant difference in terms of consumer choice.

Mrs. CAPPS. And you want to repeat what you think are the barriers here?

Mr. DEVITT. The barrier is that if I want to produce a GSM device that will work on Vodafone's network, I don't have to ask Vodafone's permission. If I want to produce a CDMA device that works on Verizon's network, I have to ask Verizon's permission. That is the only difference.

Mrs. CAPPS. I guess I am also concerned because you made your opening statement about that you don't like regulations, and I know Mr. Stupak when he comes with his very rural district in Michigan and parts of my district are very rural, too, and I am always concerned about the private sector's willingness to get into places that aren't so lucrative for it. What do you propose in that area?

Mr. DEVITT. The solution there—well, there is actually a number of things that you could do under those circumstances because I could envisage producing devices that were solely designed to increase network coverage in rural areas.

Mrs. CAPPS. What would the incentive be?

Mr. DEVITT. My incentive would be that I would be selling those devices to your constituents.

Mrs. CAPPS. But not as many as you would in some other glamorous areas.

Mr. DEVITT. Certainly not. That is why I personally wouldn't choose to go into business in the rural markets, but I know that there are plenty of other entrepreneurs who would.

Mrs. CAPPS. How about Mr. Wu? You want to finish that off?

Mr. WU. I am sorry, which topic exactly?

Mrs. CAPPS. The way that we could open up access on innovation.

Mr. WU. Right. Well, I think it is, to get back to that rural issue you were just talking about, I think that is why the subcommittee and Congress and the FCC have to think carefully about the 700 MHz auctions as a solution to a different set of problems. I mean, we have a series of problems that have to do with device interoperability and that we have been talking mostly about. But I think we can't solve these problems. You are concerned about rural broadband, rural access solely with device operability rules. They are just different problems. The solution to that lies in the 700 MHz option, and I think we have to understand that that is a different tool for solving that problem.

Mrs. CAPPS. Is that a way to solve that problem?

Mr. WU. I think that is the best way to solve that problem. There is spectrum coming available in an auction that can be used to solve the rural broadband, the rural access problem. Right now we are not necessarily headed in that direction, and I think it is very important that we make sure that this historic opportunity to have the last options be used to solve the most serious problem, which is rural coverage.

Mrs. CAPPS. And if my colleague——

Mr. WU. I think it is important to talk about Carterfone and all these issues, but understand that this conversation is not going to solve those coverage issues at all. That is a completely different conversation.

Mrs. CAPPS. And some interoperability national security issues could also need that kind of direct involvement from the Federal Government, you would think?

Mr. WU. Right. I mean, we are talking about two issues in this hearing. One is the issue of device interoperability and freedom to innovate. These are Mr. Devitt's positions, and they are all very important. The other issue is we shouldn't think that those rules will solve the problem of rural broadband, public safety. Those are the 700 MHz options, and those have to be done correctly or we are going to miss this historical opportunity to really change these things. I mean, I like Carterfone, but don't be fooled to think that

Carterfone solves any of these rural issues or any of these public safety issues.

Mrs. CAPPS. Thank you. This is my first time here. I certainly don't want to run over time and make the chairman unhappy. In lieu of the next person, Mr. Shimkus, your turn now for 5 minutes.

Mr. SHIMKUS. Yes, ma'am. I think I have 8 minutes because——

Mrs. CAPPS. Eight minutes.

Mr. SHIMKUS. No, that's all right. I would invite you to southern Illinois. It is very glamorous, Lois, in southern Illinois, maybe not very populated, but it is very glamorous.

Mrs. CAPPS. I hear you.

Mr. SHIMKUS. And I wish Chairman Markey was here because I know Rush Limbaugh gave away 10 iPhones, and I thought maybe you got that as a loyal listener to Rush Limbaugh. I guess he is not commenting.

A couple things. The good thing about to listen to your testimony is that you are all very smart, you are involved in looking at the industry and consumer protections, is that you hear things that it makes you want to ask a few questions. I know a colleague of mine, this is Mr. Murray, who is trying to get out of a 12-year lease on an apartment, or Mr. Devitt may have mentioned it. Guess what. He is not going to get out base paying 1 month's rent. I have an issue with people who don't read contracts, understand contractual obligations. And for us just to say, well, let us just have no contractual obligations, let us don't have people read and understand the responsibilities. I bought three phones for my kids, didn't buy the service contract. My choice. My son dropped it in water, zapped one of them. Guess who was responsible? Me. What did I do? Well, I called the provider, and they helped me find a used, turned-in phone, so I got the cheapest one I could, and I went on with my contractual obligations because there is always an issue of raising the capital, assumption of risk and trying to get a return on that investment. And when we micromanage, when we regulate, we discourage capital flow.

And when we talk about the rural debate, the rural debate is we want service. We don't have service in all parts of my district, and who is going to provide the service? It is going to be guys like Mr. Evans who are going to be new entrants into this market, who are going to say there is a market out there that I can invest capital, I can assume risk, and I am going to get a return. One of the questions will be if we move to a net neutrality debate in the new MHz, will that incentivize competitors to bid or will that discourage? And I want to ask Mr. Evans and Mr. Zipperstein real quick on that question.

Mr. EVANS. Well, from my perspective, it is going to discourage my participation in it because I am effectively buying a piece of spectrum now that is more encumbered than any other spectrum that I own. Therefore, that spectrum should be sold to me at a discount. Where I envision this going in the long term frankly is if we put that type of regulation in place today, we will lose a lot of money in the Treasury. Sell that spectrum at a discount and once those individuals who have never run wireless networks before go out and understand that you can't just attach anything to a wireless network and make it work, they are going to come back up here wanting those encumbers released. So then you are going to have to take those laws down, and you are going to have lost the money that you would have raised by having a fair and open market competition. People believe that they can go and make an open access model work. I think they have every right to go out and bid in the 700 MHz auction like any other auction and go make it work.

Mr. SHIMKUS. And there are people in the tech community that have multi-billion dollars of capital to be able to bid on these things. I know one in particular. So they should be able. If they want to provide all of this great service, if they want to have net neutrality over the airwaves, let them come through the market.

Mr. Zipperstein, you want to answer that question?

Mr. ZIPPERSTEIN. Yes, sir. I would agree with everything that Mr. Evans said, and I would simply add as I mentioned earlier that Mr. Evans had a business plan that he put together. He participated in open, fair, transparent auction for a 4G spectrum last year, the AWS auction. There were no encumbrances such as those that are being suggested should be applied to the next 4G auction, the 700 MHz auction; and yet, here we have an example, Mr. Evans, of a businessman who felt that there was a reasonable case to be made for investing capital and for building out a network to serve his rural customers.

Mr. SHIMKUS. Thanks. So many questions, so little time. I am glad to see my friend Anna Eshoo is here; and we penned a letter on this ITC ruling, and obviously our concern is first-line responders and stuff. Maybe I will go back to Mr. Zipperstein first. If the President does not disapprove the ITC's decision, what will be the impact on the wireless industry's ability to deliver cutting-edge products to enhance public safety and enable the United States to achieve its goal of ubiquitous, affordable broadband deployment by the end of 2007? Kind of the same type of question, but it really addresses the ITC also.

Mr. ZIPPERSTEIN. Congressman, the impact will be devastating. Essentially, as you know, this is a patent dispute between QUALCOMM and Broadcom. QUALCOMM was found to have infringed a single Broadcom patent that Broadcom bought second-hand. They didn't invest in or didn't invent this particular technology. Broadcom is enforcing its patent that it bought second-hand against QUALCOMM. It is really up to QUALCOMM to resolve this issue. But the impact as you mentioned, Congressman, on public safety, on innovation in the wireless sector, would be devastating; and I think that every single person appearing on this panel and every Member of Congress should be very concerned about that.

Mr. SHIMKUS. And I think some of us are, and I appreciate those comments. Mr. Evans, and if we have time, Mr. Clark, we may want you to respond, because we are referring to NARUC. They opposed the 1993 preemption of States on matters related to entry and rates, yet between 1993 and 2005 the number of subscribers grew. This is the argument. You all are saying that this is a highly competitive market. This is probably the most competitive market in our country, and it is the most diverse, energetic and exciting. And one of the reasons I always say before this committee is because we do not try to regulate. In fact, it moves quicker, and we can actually regulate. And these are the stats. The numbers of subscribers grew nearly 13-fold to 207.9 million. The average local monthly bill dropped nearly 20 percent to $49.98. Minutes of use per subscriber jumped more than five-fold to 740 per month, and the cost per minute dropped more than six-fold to 7 cents from 44 cents. That is a success story. And in 2005, there were only 25 FCC complaints per million wireless subscribers. Is there any reason to think that NARUC would not be similarly wrong in opposing a national framework for wireless terms and conditions? Go ahead, Mr. Evans.

Mr. EVANS. Well, I am certainly in favor of that. My concern as an entrepreneur that is going out to start a business in call it seven or eight different States around the country is that we are going to be somewhat resource limited, and we have to try to comply with several different sets of State regulations in order to get up and running. It is going to severely delay our ability to get out into a competitive marketplace and to bring a product out that is severely underserved today. So we certainly support the idea of a national framework extending beyond rates and entry today and encompassing all elements of wireless as we see fit. We think that makes the most sense. This is a national product that is out there. It is not a regional product, it is not a local product, it is national; and therefore, it should be regulated from that perspective nationally.

Mr. SHIMKUS. Thank you, Mr. Chairman. I know my time is short, but because I referred to NARUC, if Mr. Clark could respond to that question? It is your call, Mr. Chairman.

Mr. MARKEY. No, that is fine. A brief answer, Mr. Clark.

Mr. CLARK. Certainly, Mr. Chairman and Congressman. I am not aware of NARUC's position in 1993.

Mr. SHIMKUS. Well, check it out. That is the point.

Mr. CLARK. Clearly the market has had beneficial impacts for consumers, and frankly, no one is a bigger supporter of the market than myself. But there are certain issues that come up, even in the fully functioning market, things like slamming, cramming, specific issues like this that still need somewhere in Government for individuals to turn to. We are arguing that even if you have Federal standards, it is inappropriate to force consumers across America to call Washington, DC, to enforce those standards, that you need some point of local contact. We suggest that PUCs and attorneys general are the ones who can most effectively enforce those rules.

Mr. SHIMKUS. Thank you, Mr. Chairman. I appreciate it.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from Pennsylvania, Mr. Doyle.

Mr. DOYLE. Thank you, Mr. Chairman. Mr. Zipperstein, just briefly, I am curious. Press reports say that Verizon had first dibs on Apple's iPhone, but your company turned them down. I am just curious, was it because they wanted features on the phone that you weren't comfortable with, or I am just curious why you turned down the chance to be the provider for the Apple iPhone.

Mr. ZIPPERSTEIN. I have to be careful about disclosing confidential discussions, but I think it is fair to say that we didn't view it as the right opportunity for us at that time.

Mr. DOYLE. Fair enough. I thought it was maybe because you couldn't get the Verizon logo on the phone.

Mr. ZIPPERSTEIN. Probably. I should say that despite the hype about the iPhone in the media over the last couple of weeks and the press attention, the product has only been out in the market for 10 days or so; and I think it is fair to say the jury is probably still out. We will just have to wait and see how the market reacts, just like we did with the RAZR.

Mr. DOYLE. Fair enough. Professor Wu, Google told the FCC that incumbents have big advantages going into the DTV auction. Could you explain the wholesaling that they and Frontline sought, and how that might benefit consumers?

Mr. WU. Sure, I would be pleased to. In the 700 MHz, one of the big proposals that is out there is the wholesaling proposal; and the idea is to create a creature, to create an entity whose interest is giving the most amount of bandwidth to Americans as possible and a corporate entity whose only mission in life is not retail but simply making available bandwidth and selling it to as many people who want it as possible. That is why people often discuss the wholesale model as one of the best solutions of the problem of coverage in this country in the sense that when you have a wholesale model, you have an entity which does not retail but relies on everyone else, anyone who wants to retail or try to sell to Americans bandwidth that opportunity. And so you create a creature that by its nature wants to do nothing but put wireless bandwidth out there for Americans to use. And so I think that is why it is important to seize this opportunity and adopt a different model for 700 MHz than we have adopted for the rest of the spectrum and see what the results may be.

Mr. DOYLE. Mr. Devitt, how do you feel about that?

Mr. DEVITT. Well, there are at least two separate issues here, and one is how do we create more competition in broadband wireless and broadband services for consumers? And the only way to do that it would appear is to mandate that there be new entrants into the market. One way to ensure that is to create a wholesale market in the 700 MHz auction. I think that is an exciting opportunity. I don't have a view one way or the other on the merits of the specific Frontline proposal or the specific Google proposal, but as I said at the outset of my comments, what frustrates me is this idea that I require permission to innovate and for someone else who wants to bring you services to market and wants to provide services say to rural America. The fact that they are in the death grip of a number of incumbent providers makes it very difficult for them to do so, and a wholesale submodel would be one that would solve that.

The issue that I am more focused on because I am a developer of content and applications and services for the end consumer is again the death grip that the carriers have on the device market, and on the applications and services that I can deliver to consumers through those devices. And what I recommend the solution to that is is some implementation of Carterfone which I do not see laying more regulation upon the industry. I see that as deregulating it.

Mr. DOYLE. Right.

Mr. DEVITT. I think creating open access, creating more choices for consumers, creating more opportunities for innovators is a reversal of regulations, a rollback of control, and that is why I am passionate about that issue. As a consumer, I support calls for additional services in the 700 MHz.

Mr. DOYLE. Well, what about that, Mr. Zipperstein? Let's talk about the Motorola RAZR. I mean, that is a very popular phone, and Verizon sells one, and Cricket also sells one, and Alltel sells one. Now, your phone, the Verizon model, you can't download MP3 files which are the most popular—I think Windows Media is yours and then you also have an online music store that sells songs in the Windows Media format. Why would you disable a popular feature that would allow people to play MP3s from your phone?

Mr. ZIPPERSTEIN. When we entered the music business January 2006, Congressman, we made the determination at the time that we would use a model that in some respects was similar to the iTunes model that Apple used and in some respects similar to some of the other models out there. So we needed to acquire from the music publishers, from the recording industry, the right to legally sell their music over the air or through a Web site. We needed to be very, very cautious and careful to protect the digital rights associated with the music that we sell. Our music business has been very, very successful. I believe that the Verizon wireless music Web site, based upon recent information I heard, is just No. 2 to Apple's iTunes.

Mr. DOYLE. Well, what about the MP3s that a consumer already owns and gets off their CD? I mean, why wouldn't you allow them to have both? Why does it have to be either or?

Mr. ZIPPERSTEIN. Actually, with our music product it is possible for a consumer to acquire music to their phone in two ways. First, they can download it over the air, or they can move music that is in their personal collection. For example, if they take a CD and burn the CD music or upload the CD music, transfer it from their CD that they buy in the store to the computer, they can side load that music onto their phone.

Mr. DOYLE. But Mac users can't, just PC users?

Mr. ZIPPERSTEIN. Any computer user, Mac or PC, is able to take—if they go to the record store, buy a CD then upload that music to their computer, they can transfer it to their phone.

Mr. DOYLE. I am sorry, Mr. Chairman. Thanks.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from Mississippi, Mr. Pickering.

Mr. PICKERING. Mr. Chairman, thank you again. What I would like to do is ask questions that will put things in the context of the decision before the FCC today, because I think it addresses all the issues that we have discussed, and that is the decisions on 700 that the FCC is about to do.

But I would also like to put their decisions in context as we talk about whether we have adequately competitive markets, and I think as you look at a monopoly, what we had before 1996, and we have seen a growing competition on the wireline side, voice, video, data. Then you look at wireless, and it is more robust competition. So as you move along the competitive spectrum, you would have wireline, wireless, and then you have the Internet model; and if we had the two ends of the spectrum, Internet being the most open, most competitive, most innovative, the question we have before us on the 700, can you take a portion, just a portion, you don't have to do anything to regulate Mr. Evans or Mr. Zipperstein or any of the incumbents, create an open space to see if you can create the fully competitive, fully vibrant, innovative space within wireless by having interoperability of devices and a wholesale market. Now, we are not talking about regulating content or net neutrality. Net neutrality is a different debate. Now, sometimes people will bring in net neutrality to try to taint what we are talking about in this case, and we want to keep that separate. It is wholesale and it is device portability is what we are talking about. And in that context, can a portion of the spectrum leaven the entire wireless sector so that it is more competitive on price, on service, and on devices? And so my question, Mr. Zipperstein, you do not have to do Carterfone and 700, you don't have to bid on that spectrum if it is conditioned in that way, you do not have to change your business model, neither does Mr. Evans. But if there are those who want to invest in a new business model that will create a more dynamic, vibrant, healthy, competitive wireless sector, what is wrong with that?

Mr. ZIPPERSTEIN. There is nothing wrong with someone voluntarily participating in an open and fair, transparent auction, and if they decide that the business model that they want to use is along the lines that you have discussed, Congressman, they are free to do that. I think that was the point that the ranking member made, and we agree with that analysis. But we don't think that a business model should be hardwired into the auction by regulatory fiat in advance. I would also mention that there are a number of concerns in the real world that can result from a mandate in this area. We could have, for example, devices that come onto the network that are not GPS enabled. Therefore we would have problems ensuring the adequacy of the E911 Phase II system. That is extremely important to the country, extremely important to public safety. So I think that we need to just tread very, very carefully; but if somebody can figure it out and make it work as a business model, then by all means they ought to have the right to bid, and if they win, they ought to have the right to try out that business model.

Mr. PICKERING. Now, Mr. Evans, you would probably bid for the CMA and the 700, is that correct?

Mr. EVANS. I purchase mostly CMA, so a couple of EAs as well.

Mr. PICKERING. EAs? Now, none of the proposals on Carterfone or openness relate to EA or CMA under the current proposals. Are you concerned that if you do require openness in the upper bands that it will intensify the competition in the lower bands and the lower markets and drive your price of the auction up?

Mr. EVANS. Well, I think that is certainly one factor, but I think a bigger factor is the fact that I believe you would actually shut down capital investment into rural markets by doing that. If venture capitalists or anybody who is putting their own capital into a project suddenly realizes that there is a band of spectrum that a group received for free and they are going to go out and do something with it——

Mr. PICKERING. Nobody is talking about doing anything for free.

Mr. EVANS. OK.

Mr. PICKERING. There would be reserve prices, and you would have full-market value at any auction.

Mr. EVANS. I understand. Then I will have acquired spectrum based on a certain set of rules, and now under a different set of rules there is a new piece of spectrum that is out there whereby we don't know what they are going to do with it. We don't know what they are going to deploy. We don't know what type of technology, but we know that it is open. Therefore you substantially lower the barrier to entry for any competitor to come in, literally anybody in the world who wanted to walk in and try to turn on a wireless network——

Mr. PICKERING. I think you have captured the issue. Do you want more competition or less competition?

Mr. EVANS. The issue is the following. I think you do want more competition, but the issue is there isn't a wireless network out there, there is not a wireless technology out there today that will accomplish that. So you are going to give up a scarce resource or sell a scarce resource out there today that you are not going to be able to recoup the value on at a later date; and you are going to inhibit other people from deploying proven technologies in that same scenario.

Mr. PICKERING. Mr. Evans, it is just a wholesale network. I think the technology is clearly available to do wholesale. You are just talking about taking somebody who will build a network and sell at a wholesale rate, which is a very healthy component with any fully functioning economic market. We are not talking about content, and device portability is technically feasible. So this is not rocket science. This is wholesale and device portability. What is wrong with that?

Mr. EVANS. I would simply ask how many wholesale models in the U.S. wireless industry, which has been open, and you have been able to become a wholesaler in the wireless industry for 20 years. How many of those models have been successful?

Mr. PICKERING. Well, the question would be do you have a national network and opportunity in this spectrum to do so? Mr. Chairman, I yield back.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from Texas, Mr. Gonzalez.

Mr. GONZALEZ. Thank you very much, Mr. Chairman. Happy birthday. I guess I am just going to build on somewhat, go in a different direction than my colleague, Mr. Pickering, but I will remind individuals that he prefaced his statements in his opening statement as to what open access really does mean and what others may feel that it means and whether this is an issue of net neutrality coming into the wireless, into the airwaves. Of course it is. We may call it open access, but I think let us just be frank in our discussion. We can continue this debate. Unfortunately, I never have liked the term "net neutrality" because I don't think it is accurate, and I don't like open access because I don't think it is descriptive, either. However, I think the professor understands that if you define the debate at the beginning, you win the debate. We may already be there, I don't think so.

But let us just start off with open access. In building on what Chip was talking about, it is just going to be a sliver. We are going to have a pilot project or something. If this is such a wonderful model to follow, why a sliver? Why not just have open access conditions supplied to the entire spectrum? And I will ask Professor Wu. Would you be in favor to apply the open access model to the entire auction?

Mr. WU. To the entire auction or the entire——

Mr. GONZALEZ. Everything that is going to be out there in 700. Everything. I mean, why are we only going to——

Mr. WU. I will just say I would be in favor of that. I think it is——

Mr. GONZALEZ. OK. I just want to know if you guys really believe in this, then you would say why are we going to experiment? Why are we going to have just a small portion of what is out there available? This is it. This is the answer. And Mr. Devitt, would you agree with the professor to extend that to what we are going to be auctioning at that MHz?

Mr. DEVITT. Oh, let me be clear. I would go back and apply it retrospectively to all of the spectrum in the country.

Mr. GONZALEZ. OK. And that is what I thought. Let me go on because I am going to follow up, Professor, specifically with you. You seem, and others, to totally dismiss the investment that it takes in the way of buildout, and you are assuming for whatever reason that under this new model we will still have individuals and entities making that kind of an investment without any restrictions and such. And to me this is just a business model. There is always exclusivity agreements and such. Each and every one of you in your business dealings have entered those type of contracts. Now, if we take the iPhone for instance, there was an interview, and this is what Steve Jobs said. Is the iPhone a wireless iPod or is it a phone that has an iPod in it? And this is what he said. It is three things. It is the best iPod we have ever made, if it was a cell phone alone, it is an incredible cell phone, but what it is is the Internet in your pocket. And so Mr. Zipperstein, this is not the RAZR. This is the Internet, and this is what we have been discussing from day one in this committee.

Mr. ZIPPERSTEIN. Right.

Mr. GONZALEZ. And this is what he said. Why AT&T? Why? He said, well, he believed that they have spent a fortune to build these 3G networks, so they have a lot of bandwidth. Phones are not capable of taking advantage of it because their Internet experience is so poor. They have lousy browsers, and then he went on to say we are going to take advantage of some of the investments they have made in their bandwidth in an entirely new way. So it did spur this innovation in what I think will be the future because of the carriers' and the networks' previous investment in building out the system that accommodates the device. So we have the carriers, we have the device manufacturers, and we have the content aggregators. No one does anything for free, and Mr. Murray, you said Google was doing something for free. No one does anything for free. There has to be a return. And I forget exactly what you were alluding to.

Mr. MURRAY. That was actually the BlackBerry. They wanted to offer a free mapping feature to their customers, and absolutely, people were purchasing their phones, but they felt that that was——

Mr. GONZALEZ. And I am sure it was just out of the goodness of their heart. There wasn't any business connection, and I am sure there was no other motive. But what I am getting at, let us just say you get your way and we have this auction. You anticipate that we are going to have a new entrant, and I think, Professor, you may be the person to tell us who that new entrant may be because there are stories out there already as to who probably has the capital and the assets to make that investment. So I would like for you to answer, who do you anticipate this new entrant would be, who would build out the network because they probably would have to go to the third party to have it built out, right?

Mr. WU. Well, I will answer that.

Mr. GONZALEZ. What would be the return for that person that is buying that spectrum? How would they make their money? How would they pay the third party for the buildout?

Mr. WU. Wholesale markets are common in many different markets. Mr. Pickering has last mentioned energy markets. There are parties with billions and billions of dollars who are interested in investing, and we have seen them, whether they are associated with Frontline or other parties, interested in entering this market on a different model. I think there is no question that if this auction comes and as you suggested, if you take this amount of spectrum and you make it a wholesale structurally separated model, there are people who are interested in investing billions, investing in buildouts on a model where your return of investment comes from selling bandwidth to anyone who is interested.

Let me give you an example of a company that lives on a full wholesale model. Ford Motors. Ford Motors does no retail. Ford Motors is only a supplier of cars, and they have their retailing given to everybody else. If Ford Motors can make money on a wholesale model, then surely someone in the Internet and wireless broadband model can make money on a wholesale model. There is no question this is an established model. It is part of a——

Mr. GONZALEZ. Do you believe that the new entrants aren't some of the current players out there, not under the carrier or network category, but definitely as content? I mean, that is where this is all going, isn't it? I mean, Google is not in this business to simply provide free services. It is to compile a consumer profile, to build an advertising hierarchy. We know what is going on out there. I am concerned about who is going to assume the responsibility of making the capital investment to make sure that we continue to build out broadband capability so that all your devices, and that includes Mr. Devitt, and I know that you eventually sold to—I think Zingy now has it. I mean, their advertising package starts at $25,000. So who takes the place of AT&T and Verizon and others? That is my question.

Mr. WU. I think it is a great question. I agree with you 100 percent that no one does anything for free, but as I have said, if Ford Motors can make money and General Motors can make money on wholesale models, new entrants have every——

Mr. GONZALEZ. Mr. Wu, I would not use our domestic automakers at this point in time as a model.

Mr. WU. Let us talk about the domestic automakers early in the 20th century which is where they would be. The companies that come into this market will have more incentives to build than our friends at Verizon or AT&T. AT&T and Verizon already have networks. Their interest in getting more spectrum is in protecting their market share, not in building new networks. They already have spectrum. If you already have spectrum, you have less reason to want to build. If you don't have spectrum, then you are waiting to try and create a new wholesale model. Those are the parties who are going to invest in building the world's best wireless network, and that is what America should have.

Mr. GONZALEZ. Thank you. My time is up.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentlelady from California, Ms. Eshoo.

Ms. ESHOO. Thank you, Mr. Chairman, for having another really important and substantive hearing in your series that you began in the beginning of the year. I apologize for not being here for a good deal of it. I have duties at the House Intelligence Committee as well, so I am trying to keep you safe, and now let us see if we can be competitive, how is that?

This is a very interesting discussion. I think all too often the work that is put into the memorandums that the committee staff does kind of goes unnoticed, but I would like to make note of what is on page 2, and that is essentially that the top four national carriers represent 85 percent of the market for wireless. So this is about protecting in my view the most sought-after real estate there is. It is really beachfront property, and we don't want anybody else coming to the beach. They have spectrum that they are not even using. So that is what this discussion is about, how we enlarge this, how we allow for real competition. I have learned around here in Congress that everybody is for competition until it comes to them, and then they don't want somebody else really competing with them. I guess that is just part of the way we operate, and I understand that, but it is an observation. But no one should think that we don't respect people making investment, capital investment. We want more capital investment. So those that have made capital investment want to keep others out, from making their own capital investment? Look, this is the way the consumer wins in our country, so I appreciate what has been said, but to my wonderful colleague from Texas, there is more to it than that. You have to fill out the story. You have to fill out the story and say, hey, are we going to go for 95 percent and not let anybody else in? So, to Mr. Devitt, thank you for traveling to Washington and being with us. I admire what you have done, and you are just one city out of my Congressional District; but for today, well, I am going to adopt you. How is that? You can be part of the 14th district. You certainly are part of the innovation that is going on in our country. Let me just ask a couple of quick questions.

First, obviously, the rollout of Apple's iPhone has caused a great deal of excitement in the country, as well it should. And I thought your answer about why you are not a partner in it was curious. It kind of reminds me of when you hear great actors being interviewed and they say, well, what role did you turn down, and they name it, and they regret it. But I appreciate the way you described it.

At any rate, it has generated a great deal of excitement, among the public and in the media, and it obviously demonstrates a great deal about innovation and also the appetite that customers have for new and exciting technologies. Another exciting product of Apple's is AirPort. It is a wireless base station as you all know that connects to any broadband network. Can any of you, maybe Mr. Murray, Professor Wu—I understand you spent some time at Stanford. I like that. Don't you wish the weather were like that here? And Mr. Devitt, why is it OK for consumers to use new technologies like AirPort that can be used on any network but the iPhone and the partnership with AT&T doesn't allow that?

Mr. WU. I will start, speaking from Stanford. Not exactly. There is something strange about——

Ms. ESHOO. I will bet you miss it, don't you?

Mr. WU. Yes, I do.

Ms. ESHOO. I am putting words in your mouth.

Mr. WU. There is something weird about this market, and I just come back to that. It is a strange market. We keep talking about the markets working, but it is an unusual market. It is not like consumer electronics, it is not like computer software, it is not like the Internet. AirPort is something—people buy computers, people hook it up to any Internet connection. They buy devices. The one big exception to America's way in technology policy is its mobile networks. They are strange, and the reason is I think historical. This is the last vestiges of the old AT&T monopoly, and it is that business model, the model that failed us, that still dominates wireless; and it is not the Internet business model which has been the driver of this Nation's economy.

Mr. DEVITT. And I would add to that that I don't think it is any surprise that it has taken 26 years for Apple to decide to produce a phone. I mean, in that previous 26 years they came up with a whole host of extraordinary computing devices, all of which they were able to attach to Verizon's DSL network or its AT&T network or its Comcast or its Time Warner without asking permission of those companies; and for some strange reason, Mr. Gonzalez, those companies in turn were prepared to go on making a significant capital investment in delivering the bandwidth necessary for those computers to work, despite the fact that they weren't allowed to switch them off remotely.

So it is as Professor Wu says, the iPhone is an extraordinary technical achievement, but it is a miracle that it is even possible under the current market condition; and we should have seen many, many more devices come to market in the years gone by.

Ms. ESHOO. Thank you very much to all of you, and Mr. Chairman, happy birthday.

Mr. MARKEY. Thank you.

Ms. ESHOO. Thank God you were born.

Mr. MARKEY. Oh, boy. You are in a minority there, but thank you. I appreciate it.

Ms. ESHOO. Well, it is what I think. It is my time. Thank you.

Mr. MARKEY. I thank the gentlelady. The Chair recognizes the gentleman from New Jersey, Mr. Ferguson. Oh, by unanimous consent, we will move to the gentlelady who is not on the subcommittee and recognize her before the remaining subcommittee members. The gentlelady Mrs. Blackburn is recognized.

Mrs. BLACKBURN. Thank you, Mr. Chairman, and I will wish you happy birthday also. And I think that as we have very robust debates that we are all glad that you were born. We all have a position that we fill here for our constituents, and I want to say thank you to our panelists for taking the time to come here and participate in the debate today. We do appreciate your time and your interest in this.

You have reset the clock on me, but that is OK. There are three things that I want to get to in my questions, and hopefully I will be able to yield back time so that you all can get on with your time. I want to talk about deficit reduction, public safety, and innovation. And we have to realize that we are here because of the Deficit Reduction Act and the set-aside for the auction of that spectrum. And I think sometimes as we debate, some of the devices that would be at the end use we forget about that. And I do think that that is an important component of this discussion that we are having, and I appreciated that Mr. Pickering focused on bringing us back to that discussion.

Mr. Wu, I would love to spend some time talking with you on your spectrum-based oligopoly as you stated it, but I am not going to do that. I am going to submit those questions. I think our debate on that would be rather robust. I think that what you would like to do is you don't like the oligopoly that you see out there but you are saying give me a shot at structuring one for my friends. And so I do think that we could have a rather robust debate on that.

Mr. Verveer, I think that I would like to start on questioning with you if I may, please. We have heard all the sides on open access and on the neutral and net neutral auction arguments, and they suggest sometimes that the only way to go about spurring innovation is to have open access rules, to have the neutrality rules, because if we don't do that, then we are going to have a beleaguered, stagnant, anti-competitive industry. And looking at the panel and listening, reading your testimonies and listening to me, I think you may come at this with the most personal historical participation in the development of the industry. And I say that in deference to you from what you have submitted to us as we look at the industry having grown. And of course, I come at this also as a parent of a son that majored in MIS and technology-related items in college and the amount that I learned as he went through school. So I want to hear from you. Do you share some of these sentiments about being beleaguered and stagnant and anti-competitive, or do you believe that consumers have access to advanced technologies at increasingly lower prices? Just your perspective on that, and then if you would come back and just address how you think open access rules would either drive or depress innovation in the wireless marketplace.

Mr. VERVEER. I believe that this market is probably as progressive as we could possibly hope. We could always do better, there is no doubt about that. But it is a wonderfully progressive market.

In fact, I believe Professor Wu in the working paper that started off the Carterfone debate describes the industry as a modern wonder, and I think that is a correct assessment.

The question about whether or not we can do better by introducing open access or other kinds of arrangements is one that at least I am personally skeptical about. I think that if for some reason we believe we don't have enough competition and we don't want the major players in the next auction, the straightforward thing to do is to say you can't participate in the next auction, just as we have in the past with spectrum caps. I don't think that is necessary, but if we believe that that was the case, that is probably the right way to do it. If we move to a so-called wholesale model, we have accomplished a variety of things. There is clearly no free lunch here, so the first thing that is going to happen as Mr. Evans said is the spectrum will be auctioned at a lower price because it is encumbered.

The second thing that is going to happen is that it will turn out it is not quite as simple in terms of saying simply open access and have it magically happen as we were told. It is going to turn out that there are going to be decisions about what kind of air interface. I think it also will turn out there is nothing magical about this in terms of rural coverage. Somebody is going to have to pay a lot of money to put a radio signal over rural areas, and there is nothing inherent about a wholesale model that would cause that to happen. There are an awful lot of things that one might wish were different or better, but in general, I think that our commitment over the last several decades to competition has been the right one. It has been the successful one.

Mrs. BLACKBURN. So then stability and predictability are two things, one you have mentioned and one you have alluded to. You see the value of that in the marketplace for spurring the innovation?

Mr. VERVEER. Well, these things are clearly very important in terms of securing investment capital.

Mrs. BLACKBURN. OK. Mr. Chairman also I have got two articles from the Wall Street Journal today, one a commentary and the other, I guess it is Review and Outlook. I would like to submit those for the record as we move forward in our discussion. They are from today's Wall Street Journal, if I may.

Mr. MARKEY. Without objection.

Mrs. BLACKBURN. Thank you.

Mr. MARKEY. And I will also, if I may, without objection, the letter on behalf of Mr. Pickering from Cellular South Company regarding the inability of small or mid-size wireless carriers to get access to the iPhone will be inserted at the same time.

The gentlelady is recognized.

Mrs. BLACKBURN. Thank you, Mr. Chairman. Mr. Evans, you mentioned a couple of times services that you were wanting to roll out. Can you describe some of the services that you are rolling out or planning to roll out?

Mr. EVANS. Certainly. First and foremost, it is broadband Internet access, just the ability for these people to access the Internet. It is something better than 250 kilobits per second. On top of that, it is our plan in 2008 to begin introducing a voice over IP solution to go in and have a competitive environment for the telephone market out in these areas as well. There is typically a local ILEC or one of the larger RBOCs that are out there operating in these areas, and we believe we can be very competitive against those individuals as well. Moving on from there, there is also we believe a market for a regional portal, if you will, where you can access information on the Internet about your local community that is out there and therefore evolve into an advertising model where we can sell local advertising, if you will, in the rural markets and provide that across our network. So we see it as a three-pronged approach to go out there, the broadband Internet access is first and foremost by far but then adding on various applications and services to sell to these individuals that don't have access to that today.

Mrs. BLACKBURN. Well, and we hear from so many of those ILECs and our rural communities about the broadband access and the effect that it has not only on the quality of life and on public safety, but also on economic development.

Mr. Chairman, I will yield back the balance of my time. Thank you for the courtesy.

Mr. MARKEY. The gentlelady's time has expired. The Chair recognizes the gentleman from New Jersey, Mr. Ferguson.

Mr. FERGUSON. Thank you, Mr. Chairman. I apologize, too. I wasn't at this entire hearing but certainly have a great deal of interest in the topics that have been discussed. I want to thank all of you for being here and for offering your various perspectives on some of the important issues that we are dealing with. Obviously, being from New Jersey, we are not only packed with people who benefit from these technologies but we are also home to some of the leaders in innovation who helped to create these products and these technologies, and we are very proud of that.

I want to begin with Mr. Zipperstein if I might. I certainly want to thank you for being here today. I know you have been fielding all sorts of different questions on different topics, and we appreciate both the work that Verizon Wireless does—we are very proud to be your home in New Jersey—but for being a leader in developing so many new technologies and services for people that really are enhancing and improving the quality of people's lives. I want to talk a little bit about some of the preemption issues that have been very important. We have a state-to-state sort of patchwork issue that we deal with in some ways, not necessarily on rates but in other ways for wireless carriers. What would be the net effect on the consumer if wireless carriers were actually subject to 51 different sets of rules on how you write subscriber contracts and formatting of bills and whatnot? Ultimately, how does that affect a customer like me?

Mr. ZIPPERSTEIN. I think the effect would be very detrimental, Congressman. A customer like you based in New Jersey also using your cell phone in Washington and other parts in between, perhaps New York, perhaps Delaware, Pennsylvania, and elsewhere in the country, you might find yourself subjected to different kinds of service mandated by different States, depending upon where you are. If you have a bill coming to your place of work, even though you live in New Jersey, the billing format may be mandated to be a different way in the place where you work than the place where you live. In some States, regulators have, for whatever reason, decided that it would be appropriate to target wireless for very, very intrusive micromanagerial sorts of monopoly, utility-style regulation, even though it seems very clear, and particularly from the comments that pretty much all the members have made in this hearing today, that the wireless industry is a nationwide inherently interstate industry, to use the chairman's term, and therefore, this sort of individual state-by-state patchwork could harm consumers, could create confusion, could lead to higher costs as we would have to spend more money to achieve compliance with multiple conflicting, inconsistent regulations. That is why we favor a more appropriate approach which would have a Federal set of rules.

Mr. FERGUSON. This national framework that has been talked about, we have heard about the need, I certainly have heard about and I know many of us have heard about this need, for this national framework for wireless service. How does a national framework for wireless service make our constituents better off than they are today given the current set of standards?

Mr. ZIPPERSTEIN. We think it achieves first of all consistency across the country so that consumers, whether they are in New Jersey or California, Massachusetts, would have the same expectations as to the nature of the service that they are receiving from their wireless carrier. It would also enhance the ability of carriers to efficiently and cost-effectively serve their customers on a nationwide basis.

Mr. FERGUSON. Mr. Clark, thank you for being here today. I appreciate your traveling here from North Dakota.

Mr. CLARK. That is correct.

Mr. FERGUSON. Wireless consumers are mobile. They take their phones everywhere. They pretty much work everywhere. They travel between States. Shouldn't consumers have some consistent set of guidelines and expectations regarding what kind of consumer protections they can count on? Wouldn't this be easier to deliver and to be more uniform if this were sort of delivered from the Federal level? I realize I am asking a State regulator. But just maybe you could give me your sort of honest assessment of that.

Mr. CLARK. Congressman, NARUC is certainly not opposed at all to some sort of Federal framework for a consistent approach to how wireless issues are, the standards that the industry has to deal with. The concern that we have is that the actual proposal forwarded by the wireless industry goes far beyond that. They try to attempt to federalize both the standards and the enforcement, and that is the concern that we have because we don't think it is a viable option to tell folks in New Jersey or North Dakota when they have something crammed on their wireless bill, a service they didn't order, to tell them to call Washington, DC, because experience is the FCC just doesn't have the resources to handle that. We believe that you have to have a local point of contact for enforcement.

Mr. FERGUSON. I realize my time is up. Could I have an additional 1 minute?

Mr. MARKEY. Without objection.

Mr. FERGUSON. Thank you. We have 33 attorneys general, including the attorneys general in my State and your State, who have entered into these agreements with national carriers to help address some of these challenges. Is that not a good way to go? Is that not helpful in this process?

Mr. CLARK. Congressman, I would just respectfully submit that 41 attorneys general last year signed a letter urging that the particular type of preemption of the wireless industry afforded was not appropriate for this particular marketplace.

Mr. FERGUSON. I would be interested in Mr. Zipperstein. We have 15 seconds. Can you just briefly give me your thoughts on that?

Mr. ZIPPERSTEIN. We advocate a single set of rules to be established at the Federal level, but we also are not talking about preempting State enforcement of their consumer protection rules. There are consumer protection laws that apply to all competitive industries across the board.

Mr. FERGUSON. Thank you, Mr. Chairman. I appreciate the indulgence.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from Michigan, Mr. Dingell.

Mr. DINGELL. Mr. Chairman, I thank you.

A question to Mr. Zipperstein. Mr. Zipperstein, I am lucky enough to have an Apple iPhone. Now if it is possible I am not happy with the AT&T service and I want to change carriers, assuming for the moment that the iPhone is a dual band, is there any reason why I shouldn't be able to take my phone with me to another carrier?

Mr. ZIPPERSTEIN. The only reason at this point is the exclusive contract that AT&T has with Apple.

Mr. DINGELL. That is the only reason?

Mr. ZIPPERSTEIN. That I am aware of, yes, Mr. Chairman.

Mr. DINGELL. There is no technical reason?

Mr. ZIPPERSTEIN. Well, I think you said assuming that it is a dual band GSM and CDMA, so our network is a CDMA network. If the phone is technically capable of working on a CDMA network and it meets the performance standards of the network, if it meets the requirements of the FCC and other respects, then there would not be a technical reason why it could not work.

Mr. DINGELL. So the FCC through their rulemaking and the chip makers through their magic are able to address all the questions that might exist here, is that right?

Mr. ZIPPERSTEIN. Yes, Mr. Chairman.

Mr. DINGELL. Thank you. Now, this is for my old friend, Mr. Verveer, and welcome to the committee. I have heard your argument that the wireless network of today is very different from the AT&T telephone network of 1968, and I agree with you. In fact, you and I are probably the only ones around who would remember that. But today, four wireless carriers cover 90 percent of the market, and it is pretty hard for me to ignore the reports and the testimony of Mr. Devitt that people who make wireless devices and software are not able to get new services to consumers as quickly as they would like at all. Quite frankly, this brings back my memories of Carter and Carterfone. Now, is there a reason why wireless carriers should be constricted in determining what devices consumers can use on the network and what applications they can use on their phones; and in like fashion, is there any reason why, if the original grant of the spectrum and the technical questions can be addressed, that the consumers ought not have the ability to determine what devices they are going to use on the network?

Mr. VERVEER. Mr. Chairman, assuming that the technical issues can be overcome, and some of them have to do with intricacies involving shared networks, that is the airwaves are shared between all the consumers that use them, things of that nature, but assuming they can be overcome, there is no particular reason why one shouldn't, if this seems to be the preferred course, introduce obligations for the use of any device one wants, any application one wants. The question that I have about this is whether or not we are better off relying on the competitive process to try to produce what consumers want. The carriers it seems——

Mr. DINGELL. Well, let us address the competitive process. The purpose here is to provide service to the consumers. The purpose here is to provide the maximum choice to the consumers. The purpose here is to provide competition so that the consumers are best served. The purpose here is to see to it that this provides the greatest choice and the greatest availability of service of all kinds to the consumer. Once we agree on all of those points, why is it that we should not leave this particular choice to the consumer, and why is it that the consumer's right to choose should be constrained?

Mr. VERVEER. I think, Mr. Chairman, there are two things that enter into this that are important at least to consider carefully. One is whether or not the existing carriers have any set of incentives not to try to provide what people want. If one assumes as I do that in order to maintain their businesses, they are very anxious to serve consumers, to provide what they want, we can I think rely on their wholesome incentives. The second aspect of this, however, is this. If we change these particular requirements, these particular rules, there will be consequences. I suspect the consequences will be that there will be changes in at least a couple of obvious dimensions. One, the pricing for transmission will change, the various approaches to pricing will——

Mr. DINGELL. Let me interrupt you, old friend. First of all, the Carterfone decision said that they could attach a device to the wire network if it did not cause problems. In the drafting of the original license or grant of the spectrum that can be in large part addressed. The balance of the problems can be in large part addressed by the software makers and the people who make the network. Now, why then is there a problem with this that ought not be decided in favor of the consumer as opposed to being decided in favor of somebody else?

Mr. VERVEER. See, I think the question on some level is are we sure, are we confident, that this——

Mr. DINGELL. Here is the deal. First, you insist that the grant of the spectrum address that question in that fashion. That gets rid of a lot of the problems, does it not?

Mr. VERVEER. Well——

Mr. DINGELL. Yes or no. It gets rid of a lot of problems or doesn't it?

Mr. VERVEER. I think——

Mr. DINGELL. And then the software maker comes along and the hardware maker comes along, the software and the chip address the balance of the question. And if it can't be addressed, then don't let them do it; but if it can be addressed, why should we deny them? Now obviously, the network owner, the licensee, is going to say, oh, this is scandalous that we should be doing this for the consumer. But as a consumer, and I think you and I share that concern, we think that maybe the consumer ought to be looked after and that the network owner and licensee is going to do just fine because he is going to charge whatever it costs to provide the service or he isn't going to be in business.

Mr. VERVEER. Mr. Chairman, you are absolutely right. The network operator will adjust to whatever the rules are, but there are at least a couple of things to think about. One is whether or not the preference of the majority of consumers may continue to reside in this subsidized handset model. The reason it arose I presume is because the carriers thought that this would get more people on the network. The second is the pricing rubrics. The way that we presently price wireless service will surely change if any application is available at the behest——

Mr. DINGELL. That is of course true, and they are going to price it at the level which enables them to continue in business and continue making money. But we have already addressed the problem. Technically, they can address it, and quite honestly, there is no reason to say, all right, we are just going to blank it and say you can't do it. In the Carterfone case, what they do is they see to it that the telephone fits on the system. I apologize. I know I am over my time, Mr. Chairman. When I look at the bottom of my telephone, it says this is by rule and regulation of the FCC determined to be suitable for the use on the particular network. Now, is there any reason why we wouldn't have the same thing with regard to the wireless phone? I see none, do you?

Mr. VERVEER. You clearly can. I think there is no doubt about that. I think the question that is uncertain, and I really don't believe that there is any way for us to know the answer.

Mr. DINGELL. The answer is that you set it up beforehand. The grant of the license permits them to function on the basis of having all this be compatible. The software, the hardware makers, they do what they have got to do, and all of a sudden you have solved the problem, and there is no reason to have a ban on this kind of arrangement. There is no reason why we ought not look after the consumer who is the guy for whom we are setting this damned thing up in the first place and who is going to be paying the cost.

Mr. VERVEER. I agree that I don't know, at least I am not aware of any technical inhibitions.

Mr. DINGELL. All right.

Mr. VERVEER. The thing that is uncertain——

Mr. DINGELL. Well, I am 3 minutes and 46 seconds past my time. It is good to see you again. It is good to see you, Mr. Chairman.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from Michigan, Mr. Stupak.

Mr. STUPAK. Thank you, Mr. Chairman. Mr. Clark, if I may, a couple questions for you. It was reported earlier this year that the

FCC was finally attempting to clear the backlog of thousands of Do Not Call registry complaints from its backlog. There are tens of thousands of them. I asked Chairman Martin about this when he appeared before our committee in March, our oversight hearing. He confirmed that these complaints were from as far back as 4 years ago. He confirmed that the FCC was sending letters to many consumers asking for more information because the FCC was unable to process the complaint and then was closing out those complaints. Can you please contrast this experience with how the States dealt with the Do Not Call registry complaints?

Mr. CLARK. Congressman, I think it is a constructive example why we say there has to be a local point of contact, and it has to go beyond just laws of general applicability. There were those who were trying to strike down State Do Not Call lists in favor of the completely Federalized system. The experience was is that the only place consumers got individual relief was at States. I will give an example from my own State, sparsely populated, 640,000 people. In the first few years of the operation of North Dakota's Do Not Call list, there were more individual enforcement actions brought just in North Dakota than in the entire Federal Government. It is compared to millions of complaints that were received at the FCC. And I don't think it is because folks at the FCC don't care or they are bad people, it is just that when you are looking at a mass market of 300 million people, you can't vest all the authority with one Federal Government agency and expect that individual complaints can be heard.

Mr. STUPAK. So even if you increased the resources at the FCC, do you think they would be able to handle this on a nationwide average of complaints?

Mr. CLARK. Congressman, I don't think there is enough office space in Washington, DC, to create a Federal bureaucracy that would be able to handle the hundreds of thousands of individual consumer complaints that State commissions and attorneys general across the country handle.

Mr. STUPAK. Let me ask this. I realize the State consumer protection statutes help out consumers. We have used them in Michigan for price gouging on gas prices, things like that, and I know you are not an attorney general, but I assume you work with the AG's office in your capacity. So how would relying on the statutes of general applicability by the AGs provide consumers with a timely resolution of complaints compared with State Commissions that investigate and resolve individual complaints?

Mr. CLARK. Congressman, the concern that NARUC has about laws of general applicability is that there are specific, very telecom-specific concerns that States address, things like bill cramming, just a myriad of other types of issues that are interconnection disputes, eligible telecommunications carrier processing, those types of matters. And to simply say that the only relief that States have is to bring fraud investigation enforcement type actions we don't believe is reasonable. And the attorneys general agree with us. Fraud is very specifically defined. You have to prove intent, you have to prove all sorts of things, and you are not going to bring a full fraud complaint simply to address someone who had a bunch of ringtones put on their wireless bill but didn't ask for them.

Mr. STUPAK. Thanks. Mr. Evans, if I may, a couple of questions. In my opening statement, I raised concerns about the Joint Board's proposal for an interim cap on the USF support. My fear as I said was the so-called temporary caps usually become a permanent fix at the FCC, and I also believe it would also become a long-term freeze on deployment of rural wireless in many parts of the country that still need service. Agree? Disagree?

Mr. EVANS. Yes, I completely agree with you, Congressman. I think you are stifling the very thing the fund was created to do and that is expand coverage out into rural America today. Instead of continuing to feed a technology that is shrinking and going away in the ILEC business, we are instead stifling what is coming to replace that in a much more economical way and clearly in a way that consumers prefer, that is in the wireless world. So I strongly disagree with those actions and believe that should be left alone and continue to prosper the way it has.

Mr. STUPAK. Let me ask this. Wireless carriers have been telling me they are having trouble securing roaming agreements with large carriers, and it has a huge impact on the data that is received or the voice service, especially when they travel in different parts of the country. What can be done or what do you think should be done to provide whatever incentives or whatever you want to call it for large carriers to negotiate and in good faith protect the availability of these services in rural areas?

Mr. EVANS. I am not familiar with the carriers that have been having a lot of those issues, frankly. I mean, I can only speak to my own experience which has been negotiating two of the top four who share the same type of technology that we are using. We are obviously in very rural areas. We are deploying a third-generation network, and candidly, they have been very open to discussing those with us, and we are having ongoing negotiations. So I have not encountered what the other carriers have. I think it is a function of the fact that I am deploying a network in some cases that is two generations ahead of the bigger carriers. So their data services and everything are going to work perfectly on our network, and some of the smaller, rural carriers have not upgraded technology; and therefore, the larger carriers have been hesitant to negotiate agreements, knowing that their customers are not going to have the same experience when they go down there. So I don't know that I am qualified to really answer your question.

Mr. STUPAK. Thanks. Thanks, Mr. Chairman.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from California, Mr. Radanovich.

Mr. RADANOVICH. Thanks, Mr. Chairman. I have two questions and appreciate the patience of the panel. I am sorry I was not here to be able to hear all of the testimony, and some of these issues may have been covered, but I would like to ask two more questions of Mr. Evans and then one question for the entire panel.

Knowing that you have a relatively small company, Mr. Evans, would you be more or less willing to operate in a State that has its own disparate set of rules?

Mr. EVANS. When we went into the AWS auction last year we specifically avoided certain States that had onerous regulations around them for that very reason and elected not to purchase spectrum in those markets. That was a conscious decision on our part at that point in time, so my answer is yes, we certainly did review that and in States where we felt like it was going to be onerous, from my previous cellular experience—I built cellular networks for 20 years yes, I intentionally avoided certain States because of the regulatory environment.

Mr. RADANOVICH. Then also for you, Mr. Evans, but then I want to open up the same question to the rest of the panel. If there was an effort federally to make things more uniform on the issue of consumer protection is always there and then an issue with the States, how would you react or respond to a consumer protection regime where the standards were set at say the Federal level but that the States were empowered to enforce those standards? Is that something that you—but I would like to hear from the rest of the panel as well.

Mr. EVANS. Yes, from my perspective I think that is perfectly acceptable. I think the concern is a different playing field everywhere you go. I candidly support States being able to enforce those regulations. I think that makes a lot of sense. What I don't want to get involved in is States setting arbitrary and sometimes unnecessary additional challenges for us over and above what is at the Federal level. So insofar as there was State enforcement of a Federal regulatory environment, no, I would have no issue with that.

Mr. RADANOVICH. And even if that consumer protection regime included privacy protection, do you think that something like that could be crafted that would be suitable and acceptable at the State level as well?

Mr. EVANS. With the limited innovation, yes.

Mr. RADANOVICH. Even including——

Mr. EVANS. Knowing what I know here, yes, sir, I do believe that.

Mr. RADANOVICH. Does the rest of the panel feel the same way?

Mr. CLARK. Congressman, I believe that that is actually pretty close to what NARUC's position is, which is we think a Federal framework may be acceptable as long as there is State enforcement. One caveat that I would put to that is we do believe there should be some mechanism for some State flexibility to address an emerging issue that we can't even contemplate right now because States do tend to be the ones who are able to address those questions more quickly and not have to run immediately to the Federal Government. But I think that that can all be worked out. You can create some sort of mechanism where hopefully you wouldn't have 50 different outcomes.

Mr. ZIPPERSTEIN. I think that the regulatory community at the State level and the industry actually have been moving closer together, and I am very pleased to hear some of the comments that I have heard today as well as from the members. I think everyone has the sense here, the strong sense, Congressman, there is really a consensus in the room, that as an interstate business, wireless shouldn't be regulated on a state-by-state basis. It just doesn't make sense. It is not good for consumers, it is not good for innovation, it is not cost effective, it will drive prices up. So our view as an industry has been that there ought to be one set of rules at the Federal level. We already have 34 States and three carriers who have agreed upon a set of rules that the attorneys general of those States negotiated with the carriers. We could expand that to the other one-third of the country, and then those rules can be complied with. And the attorneys general, if they believe that a consumer protection law that applies to other competitive businesses has been violated, they are still free to enforce that; and of course I would agree that the State public utility commissions can continue to be a clearinghouse for collecting customer complaints and asking carriers to address those. What we don't want, though, is for the individual States through their public utility commissions to set different rules, because that is really going to set us backward, not move us forward.

Mr. RADANOVICH. Very good. Thank you. I am seeing heads from the rest of the panel, so I am assuming you are in concurrence.

Mr. MURRAY. If I might just add, what I didn't hear in the answer Mr. Evans gave was he didn't want to go into States where there were different standards necessarily. It sounded like he would go into some States where there were different standards. It was onerous standards that concerned him, and that is a little bit what concerns me about Federal standards. We are not averse to Federal standards, but if the goal in setting Federal standards is to lower the standards that consumers have, then yes, we are concerned. So it is a question of what is the Federal standard going to be.

Mr. RADANOVICH. All right. I thank the panel. Thank you, Mr. Chairman.

Mr. MARKEY. The gentleman's time has expired, and the time for this hearing has expired as well. Thank you so much. This was an excellent panel. I think all the members were impressed. You had nearly every member of the subcommittee come to hear you in the course of the day. And I think it is important for us at this point to actually note that it is a historic point. Back in 1993 this subcommittee moved over 200 MHz of spectrum because the subcommittee was in fact unhappy with the fact that there were two incumbent cell phone companies. They were each analog, and they were each charging 50 cents a minute. We didn't do anything except kind of work with the FCC to create a third, a fourth, a fifth, and sixth license but not allow the first two to bid in any of those markets where they already were. And all of the three or four new companies each went digital, and pretty soon it was down to 10 cents a minute; and unbelievably, the first two companies within a very brief period of time each went digital, and each were charging 10 cents a minute. And that was a way in which we were able to change the marketplace and make it possible for people like Mr. Evans and others to exist. And so we kind of reached this point now where we are at the end of the spectrum trail. We have this 700 MHz that we want to deal with now, this frequency, the 700 frequency, and we want a good result as well. And obviously, the goal of this subcommittee has always been that innovation, competition, consumer choice is the goal. And for my purpose, I think that having wholesale service with Carterfone-like principles attached to it for at least some part of this spectrum will play a big role in driving the already existing incumbent marketplace that serves 230 million Americans. So we didn't tell the first two incumbents in 1993 what they had to do, we just created a marketplace over here that they had to respond to. And that is pretty much what we are talking about here as well. We won't tell any of the incumbents what they have to do, but watch out what happens over here when there is a new part of the spectrum that has Carterfone-like principles, it has wholesale, and see what the rest of the marketplace does to respond to it. And I think that is the way that we should view this, not dictating to incumbents but creating a marketplace that kind of moves or creates an environment where new technologies, innovation, services can be created and then watch the market work once again.

We can't thank you enough for your great testimony. This hearing is adjourned.

[Whereupon, at 1:50 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

ONE HUNDRED TENTH CONGRESS

U.S. House of Representatives

Committee on Energy and Commerce

Washington, DC 20515–6115

JOHN D. DINGELL, MICHIGAN
CHAIRMAN

June 29, 2007

The Honorable Kevin J. Martin
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010 PS Docket No. 06-229, WT Docket No. 96-86 *(Ninth Notice of Proposed Rulemaking)*

Dear Chairman Martin:

We commend you for your consideration of the above-referenced rulemaking. We request that this letter be placed in the public comment file with respect to that proceeding. We believe that it is worth considering whether public-private partnerships can help First Responders use more efficiently the 24 MHz of spectrum that was cleared by the Digital Television Transition and Public Safety Act of 2005 and made available specifically for that purpose. Proposals like those of Frontline to jury-rig the 700 MHz auction, however, would force public safety officials to negotiate with one winner, of one auction, with one pre-determined business plan and no track record of success. In the end, it would harm both the broader auction and our public safety goals. We urge you to reject Frontline-type schemes and stick with your proposal in the Ninth Notice of Proposed Rulemaking to allow First Responders to negotiate with all comers outside the confines of an auction.

Public safety officials have expressed concern that Frontline does not adequately represent their interests, as evidenced in the recent filings of the National Public Safety Telecommunications Council, the Association of Public Safety Communications Officials, and others. State and local government representatives oppose the Frontline proposal for similar reasons in filings by the National Association of Telecommunications Officers and Advisors, the National Association of Counties, the U.S. Conference of Mayors, and the National League of Cities. The public safety and government officials note that little time has been available to scrutinize the 11th-hour proposal, which is short on specifics, leaving doubt whether the business plan and proposed network will really work. They also worry that the coverage, reliability, security, and quality of service will not meet public safety standards; that the network will not be available for years; and that First Responders will lack control.

Public safety officials are so skeptical, in fact, that they insist any spectrum set-aside for entities such as Frontline be granted on the condition that the licensee meet a series of public safety requirements or return the spectrum. The statement of requirements, however, will not be drafted until some time in the future. The odds of crafting precisely the right auction conditions, that create precisely the right model, and that result in precisely the right winner, who will then agree to public safety's requirements are minimal at best. We are likely to be left either with no bidder, or a winner who will neither meet the needs of public safety nor relinquish the license without a fight. Meanwhile, we would have wasted time, spoiled the auction, taken valuable spectrum out of circulation, and slowed progress toward our public safety goals. The history of spectrum policy has been marred by unfortunate incidents in which litigation delayed the allocation and use of spectrum.

Alarmingly, a number of Frontline's proposals do not even have anything to do with public safety. Suggestions to impose wholesale and so-called open access requirements, for example, are blatant poison pills to discourage competing bids and lower the price of the spectrum. An outright prohibition on participation by incumbents is similarly self-serving. Whether considered as part of the Frontline proposal or as stand-alone requirements, these restrictions are inappropriate. Business models should be left to the market, not hard-wired into auctions. Moreover, Congress overwhelmingly rejected network neutrality mandates last year in a bipartisan vote of 269 to 152 on the House floor. The Commission has also just launched proceedings which we believe will demonstrate that network neutrality and device unbundling mandates are not only unnecessary, but harmful. The National Public Safety Telecommunications Council and the Association of Public Safety Communications Officials have also expressed concerns that requiring open access would jeopardize the public safety network.

To avoid starting down a path that will be difficult, if not impossible, from which to recover, we suggest that the Commission follow the approach it outlined in the Ninth Notice of Proposed Rulemaking. There, the Commission proposed assigning half of the 24 MHz of spectrum to a public safety licensee that would have discretion to enter into public-private partnerships. This would allow more time to consider additional proposals, increase the likelihood that the network actually meets the needs of public safety, and give First Responders more control, not to mention more competitive alternatives than one license holder. Further, it does so without jeopardizing the 24 MHz of public safety spectrum, the 60 MHz of commercial spectrum, or the auction proceeds that will fund the $1 billion interoperable public safety grant program and the $1.5 billion converter-box program for digital television. The prospect of subscribers from tens of thousands of public safety agencies and the pooling of spectrum will give multiple parties incentives to negotiate with First Responders. Proposals could come from winners of this auction as well as holders of other licenses, all of whom may be willing to provide public safety access to additional spectrum and their existing infrastructure in return for access to public safety's spectrum.

This approach will also leave more spectrum available to create a greater diversity of geographic license sizes and spectrum blocks. The Commission would then have an easier time creating options for a wide variety of providers: national, regional, and local; large, medium, and small; incumbent and new entrant; rural and urban.

It is imperative that the Commission abide by the statutory timetable for the auction. Achieving the right balance between the commercial and public safety interests, however, will take fundamentally more flexibility, coordination, and cooperation than can possibly be achieved through a hastily fabricated proposal reverse-engineered into an auction. Separating this matter from the auction would also allow us to take a more cautious and deliberative approach, not just the 28 days that could be allotted to the pleading cycle without jeopardizing the January 28, 2008, statutory deadline for start of the auction. Moreover, both the First Responders and the commercial entities may see need for adjustments. Such adjustments are manageable when relationships are based on contracts and service agreements, which can have shorter durations, modification provisions, and termination clauses. Spectrum licenses, by contrast, cannot be easily modified or terminated. De-linking the debate from the auction would also free bidders to make their auction plans, rather than continue to hold them hostage as delays over this controversy continue to threaten the time that will remain between release of the rules and the auction.

If Frontline and others believe in their business plans and are genuine in their desire to help public safety, there should be no need to stack the deck. They can still participate in the auction, enter into an agreement with First Responders, and voluntarily operate their networks under a wholesale and open access model. If they cannot raise enough money to win spectrum at a fairly structured auction, this is an indication that their proposal will not adequately serve either public safety or consumers. Honest, market-based auctions work when free of onerous service conditions. They have fostered a vibrant and competitive wireless industry, and produced tens of billions of dollars in Federal revenue. But the rules are critical. If done right, they create a fair playing field. If rigged, they sway the auction toward particular parties and particular business models. Let us not mistake this proposal for what it is: yet another attempt to get valuable spectrum on the cheap.

Sincerely,

cc: Commissioner Michael J. Copps
Commissioner Jonathan S. Adelstein
Commissioner Deborah Taylor Tate
Commissioner Robert M. McDowell

Joe Barton, Ranking Member,
Committee on Energy & Commerce

Fred Upton, Ranking Member,
Subcommittee on Telecommunications &
the Internet

J. Dennis Hastert

Cliff Stearns

Ed Whitfield

Nathan Deal

Gene Green

Charles A. Gonzalez

G.K. Butterfield

Charlie Melancon

John B. Shadegg

Steve Buyer

George Radanovich

Mike Ferguson

Mike Rogers

John Sullivan

Congress of the United States
Washington, DC 20515

July, 9 2007

The Honorable Kevin J. Martin
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Dear Mr. Chairman:

As Members of Congress dedicated to homeland security and improving our nation's public safety communications, we write to express our support for a safe and fiscally responsible process to govern the upcoming 700 MHz auction for valuable public spectrum.

We appreciate the Commission's effort to bring broadband capability to the 24 MHz spectrum that Congress allocated for public safety use in the Digital Television Transition and Public Safety Act of 2005, and believe that the pending auction of spectrum in the 700 MHz band will accomplish that goal while generating billions of dollars in revenue for the Treasury. However, we urge you to ensure that the rules the FCC crafts to govern the 700 MHz auction do not impose burdensome and unnecessary "open access" regulations on licensees that might jeopardize the potential of public safety interoperable communications.

The spectrum auction process enacted by Congress and implemented by the Commission has developed a track record of success in the wireless industry for over a decade. As a result, wireless licenses were granted to entities that provided billions of dollars in proceeds for the U.S. Treasury and made efficient use of spectrum as determined by the market during this time.

These auctions were successful due to an FCC governed process that did not saddle licensees with burdensome regulations. We believe these successful auctions are instructive, and urge the Commission to critically view proposals that; 1) impose "open access" rules that dictate how licensees must manage their networks; 2) subject licensees to pricing regulation that might reduce license value; 3) provide bidding credits to potential licensees that want to exclusively provide wholesale service using the spectrum.

Any such proposal might reduce potential Federal revenue, pose a potential risk to interoperable public safety communications, and run counter to the goals of the organized public safety community.

Thank you for your consideration of our views on this matter. We urge you to ensure that the 700 MHz auction ensures a successful creation of an interoperable public safety communication system in a fiscally responsible manner.

Sincerely,

Marsha Blackburn
Member of Congress

Ralph M. Hall
Member of Congress

Joseph R. Pitts
Member of Congress

Michael C. Burgess
Member of Congress

Lamar S. Smith
Member of Congress

John R. Carter
Member of Congress

Jeb Hensarling
Member of Congress

Tom Feeney
Member of Congress

Trent Franks
Member of Congress

Joe Wilson
Member of Congress

Dan Boren
Member of Congress

Tim Murphy
Member of Congress

Adam H. Putnam
Member of Congress

Zach Wamp
Member of Congress

Pete Sessions
Member of Congress

Kay Granger
Member of Congress

Spencer Bachus
Member of Congress

Phil Gingrey
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Jo Ann Davis
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Mary Fallin
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Frank D. Lucas
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Jim Jordan
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Kenny Marchant
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Ron Lewis
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Steve Chabot
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Peter J. Roskam
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Randy Neugebauer
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Brian P. Bilbray
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Connie Mack
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Adrian Smith
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Scott Garrett
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June 27, 2006

The Honorable Frank R. Lautenberg
United States Senate
Hart Senate Office Building
Suite 324
Washington, DC 20510

Re: Wireless Telecommunications Legislation

Dear Senator Lautenberg:

I am writing to follow up on our telephone conversation this morning concerning the wireless provisions (section 1005) in the Commerce Committee's telecom bill.

Verizon Wireless, one of New Jersey's largest employers, strongly supports section 1005, and we ask for your support. You expressed concerns about the Bill's impact on protecting New Jersey consumers. As you know, the Bill specifically preserves the role of the states in protecting consumers, by guaranteeing States the power to continue enforcing against wireless carriers the *same* consumer protection laws that are "generally applicable to businesses in the state." Attorney General Farber will have *exactly* the same powers under the Bill as she does today to enforce New Jersey's consumer protection laws against wireless carriers.

The only change the Bill makes is to *protect* consumers from backward-looking, monopoly style economic regulation. State utility regulators want to treat the wireless business as if it were a monopoly, controlling the font size in our advertising, the prices we charge, the services we offer, and the investments we make. The prospect of fifty different sets of such rules would *harm* consumers by driving costs up and investment down. But wireless companies are not monopolies, and they should not be regulated as such. As you know, the wireless business is a fiercely competitive, nationwide industry. Wireless companies fight each other every day to win each other's customers. And wireless customers have benefited enormously from this competition. Wireless prices have fallen over *eighty percent* in the last ten years. Employment and capital investment in New Jersey has skyrocketed. Innovation has delivered amazing new products and services to New Jersey consumers.

Verizon Wireless has competed successfully and become the leader in the wireless industry by focusing on consumer issues. We were the first carrier to support local number portability. We were the first carrier to announce we would not list our customers' numbers in a wireless telephone directory. We were the first carrier to fight spam and pretexting. We didn't need utility regulators to tell us to do these things. We did them to beat the competition, win new customers and keep our current customers happy. And tomorrow we'll do more of the same – in a major speech at the Yankee Group Conference in New York City, I will announce that Verizon Wireless will become the first carrier to pro-rate early termination fees nationwide, because that is something our customers want.

Senator, I ask for your support for this important legislation. We are at a crucial juncture in the development of the nation's wireless industry. The choice is stark and simple: do we want state utility regulators to stunt the progress of the wireless industry with 20th Century style economic regulation, or do we want to see this 21st Century engine of economic growth generate more jobs, more investment, more innovation, and lower prices for New Jersey's wireless consumers, all the while under the watchful eye of the New Jersey Attorney General?

We hope you opt for the latter.

Very truly yours,

AIR WAR

A Fight Over What You Can Do on a Cellphone

Handset Makers Push Free Features for Which Carriers Want to Charge

By JESSICA E. VASCELLARO
June 14, 2007; Page A1
The Wall Street Journal

Wireless phone carriers and the makers of hand-held gadgets like the BlackBerry have long had a symbiotic relationship. Carriers sell the BlackBerry to subscribers, putting it in the hands of millions. In turn, the carriers get to charge their subscribers not just for voice but for pricier data service as well.

Now, a turf war is looming between the two camps, as lucrative new services such as video, games, and maps move onto mobile devices. Each camp wants to control the new offerings, and the gusher of revenue they could produce.

The war is already playing out over the popular BlackBerry. Its maker Research In Motion Ltd. wants to move beyond its core business market, so it designed a device with features like video and music players. RIM wanted to include an electronic map, too, to let users find directions. But it needed AT&T Inc., which sells BlackBerrys to consumers and provides wireless service, to agree that the new model launched earlier this year could include this mapping software.

AT&T said no. It wanted to offer its subscribers its own version of a map service, and charge them $9.99 a month.

"There's a battle for customer ownership," says Jim Balsillie, co-chief executive of RIM. "There is going to be a considerable reordering of the...food chain."

At stake for consumers are what services will be available on their mobile phones and whether they're free or cost a monthly fee. The wireless Web is taking off more slowly in America than overseas, and one reason is that U.S. carriers tightly control what applications are available on mobile devices. That's a contrast with Europe and parts of Asia, where carriers' control is less tight and where wireless services have been more broadly available for years.

Pressure is building for U.S. carriers to loosen their grip. The push comes in part from handset makers that want to make their devices more attractive by including a host of services and software applications. If the handset makers succeed, consumers could see a rise in the number of sophisticated applications available free.

For investors, at issue is who gets what share of the $15 billion-plus of revenue generated annually by mobile data services in the U.S. -- a market that is forecast to explode. Phone carriers want the revenue to offset declining revenue from their voice businesses.

Until recently, carriers and cellphone manufacturers didn't have much to fight over. The phones had few fancy features besides text messaging and cameras. But they're morphing into little computers, able to do such things as download music, stream video and surf the Web. Handset makers now include computer companies such as Hewlett-Packard Co. and Apple Inc.

The reason the carriers are in such a powerful position is that in the U.S., handset makers typically don't have direct relationships with consumers. Instead, carriers buy handsets in bulk from the likes of RIM, Nokia Corp. and Motorola Inc., reselling them to people who buy service plans. If carriers don't like a feature a handset maker has built in, they can simply refuse to buy it.

Manufacturers can sometimes overcome such resistance by having a product so sought-after that carriers don't want to say no. An example is the iPhone, due out from Apple later this month. Apple leveraged the huge popularity of its iPod music player to get AT&T to sell consumers the iPhone without also offering -- as AT&T had wanted to do -- the carrier's own line of games and ring tones.

The BlackBerry's great popularity has also sometimes let its maker flex its muscles. With nearly half the U.S. market for smart phones -- those that include features such as email and a Web browser -- RIM has been largely responsible for getting consumers to upgrade their cellphone service plans to data plans. These are more lucrative for carriers. Using this leverage, RIM has persuaded carriers to include some free features, such as instant-messaging, in BlackBerry models.

Handset makers also sometimes try to bypass the carriers' control by selling directly to consumers. But carriers' resistance to efforts to go around them can be fierce, for historical reasons. As the Web goes wireless, they want to prevent a repeat of what happened when the Internet first arose. They provided access to it, but the businesses that thrived were others, such as Amazon.com, that provided services over the Net. Carriers were reduced to what the industry calls "dumb pipes." To avoid that plight, wireless companies tightly control what services cellphone consumers can access, their cost and who displays what on cellphone screens.

The BlackBerry has long been a big money maker for the carriers. They first began buying the email devices in bulk and selling them to consumers in 2000, along with the data service plans for their use. There are about eight million BlackBerry subscribers world-wide now.

Competition soon arose. Palm Inc. and Nokia also began making handsets with email as well as voice capability. On the software side, Microsoft Corp. offered an operating system to compete with the one RIM had built for the BlackBerry.

Mike Lazaridis, who had founded RIM in 1984 while a student in Ontario, decided BlackBerry needed a makeover to keep up its fast growth. Aiming to attract ordinary cellphone users, not just business customers, he set out a few years ago to turn it into a hip consumer device.

First, he asked engineers to make it smaller. They trimmed its battery size by 20% and developed a smaller keyboard. They gave it software that recognizes the words users are trying to type.

For navigating, the team added a trackball -- in effect a tiny, upside-down computer mouse. Mr. Lazaridis baptized this model the Pearl because that's what the translucent trackball vaguely resembled.

He asked RIM employees, who included hundreds of college students, to develop new applications. Within months, they designed music players, photo software, and instant-messaging software to send short text messages quickly.

Mr. Lazaridis encouraged outside software designers, too. A software company called Magmic Inc. developed Bplay, a Web site with ring tones and games that owners of the BlackBerry Pearl could download for a few dollars each.

Another company, Handmark Inc., developed software to let users get weather, sports and news alerts. And one called 30 Second Software produced software so users could send flowers, chocolates or books to a person on a user's contact list with a few clicks.

RIM wanted to have these types of services available on the Pearl when consumers bought it. The alternative was for users to find and download the software from Web sites, via the device's Internet browser. That system would greatly reduce the services' appeal. Many people wouldn't realize the services existed or would find downloading them too hard.

Carriers refused to include these features in the menu of icons users can click on. For example, RIM executives enjoyed using their own BlackBerrys to play games like Texas Hold 'em, which can be downloaded from the Bplay Web site that Magmic built. They talked to AT&T about including the Bplay games in the BlackBerry Pearl. Instead of agreeing to this, AT&T made some Bplay games available from its own virtual store, Media Mall.

Now users of the BlackBerry Pearl must pay a few dollars to download a game. The money is split between Magmic and AT&T. "The carriers want their own content store," says a Magmic vice president, Nicholas Reichenbach.

RIM also wanted to offer BlackBerry users a free search service for finding things like movie theaters, show times and restaurants. It spent months developing such a feature with InfoSpace Inc., according to an executive of that software company. The two companies talked about possibly splitting revenue from ads sold against the locater service among RIM, InfoSpace and a wireless phone carrier.

Again, carriers balked. Sprint Nextel Corp. felt such an ad-supported service would compete with its own local navigation service -- for which Sprint charges -- according to someone familiar with the matter. The result is that InfoSpace now is trying to get BlackBerry owners to use their Web browser to download the locater service from InfoSpace's Web site. Sprint Nextel declined to comment.

RIM's Mr. Balsillie says his company's role is to create phones that carriers want to sell, but the arguments over which features make it onto the devices can be frustrating.

RIM has scored some victories. AT&T, seeing the popularity of the BlackBerry Messenger instant-messaging service, agreed to let RIM make this a standard feature on the Pearl model. Before, AT&T customers with BlackBerrys could get the instant-messaging service only by downloading it from RIM's Web site.

Even without some of the features RIM wanted built in, the Pearl was a big success when it came out last September. Wireless carriers have sold nearly a million, analysts estimate, including overseas.

Other handset makers face similar issues. The carrier Verizon Wireless declined to offer its subscribers Apple's forthcoming iPhone, according to people familiar with the matter. Verizon wanted it to include Verizon's own music and video service along with Apple's, an arrangement unacceptable to Apple. The joint owners of Verizon Wireless, Verizon Communications Inc. and Vodafone Group PLC, have been heavily marketing their music and video service for monthly fees. AT&T, by contrast, agreed to offer the iPhone without putting in its own mobile Web and entertainment service.

Earlier this year Nokia and Motorola announced their own navigation and mapping services, using Global Positioning System technology to send directions, maps and local search information to cellphones. They're trying to go straight to consumers. Motorola plans to sell a tiny GPS receiver that lets consumers access maps and directions when it's placed near its newest phones. It will be available through wireless operators and on Motorola's Web site.

Nokia has begun selling a separate smart phone with navigation software through its U.S. Nokia stores, at other retailers and online. The Finnish company is one of the few handset makers that deal with U.S. consumers directly through their own stores. Consumers who buy a mobile device at retail must activate it by swapping in a service card from another phone they've bought. While the vast majority of phones in the U.S. are sold through wireless carriers, overseas many consumers buy phones and wireless service separately.

Seeking to get ahead of the pack, Motorola, Hewlett-Packard and Nokia want to build more handsets with WiFi technology. With this, a cellphone user could tap the Internet at any café, airport or home that has a WiFi "hot spot." Besides using it for smart phones' built-in Internet browsers, consumers could use the connection to make Internet phone calls.

That would be a threat to wireless carriers. Subscribers would be bypassing the carriers' networks for calls. Carriers have so far largely refused to sell WiFi phones for mainstream cellphone and smart-phone users. To date, carriers have agreed to sell only a few handset models with WiFi, to enterprises whose employees often work at locations like hospitals.

When Nokia wanted to bring a new wireless email device to the U.S. last year, AT&T insisted it remove the WiFi chip before AT&T would offer it to consumers. A Nokia sales executive, Todd Thayer, said the company will be less likely to strike that compromise in the future and will sell WiFi handsets directly in its stores. A spokeswoman for AT&T said the carrier will permit only those built-in features it thinks subscribers want.

WiFi technology could let owners of cellphones download songs and videos more rapidly, and use the devices in areas with weak cellular reception. For those reasons, RIM also wants to build WiFi technology into BlackBerry models, says RIM's co-CEO, Mr. Balsillie. RIM plans to launch a device with WiFi by the end of the year.

The Waterloo, Ontario, company isn't slowing its push into advanced services despite carriers' resistance. In March, it gave software companies access to the code underlying more applications for advanced BlackBerrys, to make it easier for them to build services tailored to the devices.

A company called QuickPlay Media Inc. plans to launch a service this summer that would allow users to download video content like music videos and sports highlights to BlackBerrys. QuickPlay saved months of development time by using the device's existing video player rather than creating its own. Having access to the software code also enabled QuickPlay, of Toronto, to create features such as being able to easily store and locate videos on the device.

Reed Hundt's Spectrum Play

July 11, 2007, WALL STREET JOURNAL

The Federal Communications Commission has been ordered by Congress to auction off a large swath of valuable telecom spectrum licenses by the end of January. The only question is whether the auction will be open and fair, or tainted by rules that favor some potential bidders over others. It looks as if FCC Chairman Kevin Martin has opted for the latter.

The agency hasn't formally released the rules, but yesterday USA Today quoted Mr. Martin as saying that "Whoever wins this spectrum has to provide . . . [a] truly open broadband network -- one that will open the door to a lot of innovative services for customers." In other words, Mr. Martin wants to saddle the winning bidder with "net neutrality" mandates.

Mr. Martin didn't offer any proof that this "door" is currently closed, that competition in wireless broadband is lacking, or that consumers are deprived of the latest gadgets and services. And no wonder. The FCC's most recent report on wireless competition concludes that, "With respect to carrier conduct, the record indicates that competitive pressure continues to drive carriers to introduce innovative pricing plans and service offerings, and to match the pricing and service innovations introduced by rival carriers."

This should be an easy call, especially for an FCC headed by a man who claims to understand economic competition. Auctions are the most efficient way to get spectrum to market, and rigging them to play favorites defeats their purpose. But Chairman Martin is under political pressure to jerry-rig the process. An upstart telecom firm called Frontline Wireless, which is headed by former FCC Chairman Reed Hundt and backed by Google, wants the agency to place conditions on the sale.

Mr. Hundt wants the spectrum winner to be obligated to operate as a wholesale-only carrier and make its network available to rivals at regulated rates. The Frontline proposal also attaches net neutrality strings to the licenses that would ban a network operator (like Verizon) from charging a content provider (like Google) extra fees for premium service. Such requirements are poison pills intended to scare away bidders and lower the price of the spectrum. If AT&T, T-Mobile and other carriers can't earn a competitive return on their investment, they're less likely to bid.

But a rigged auction that steers spectrum away from those best prepared to use it immediately also bodes ill for consumers. It means higher prices and slower deployment of next generation services that make workers more productive and the U.S. more competitive.

Frontline says it will use the spectrum to build a nationwide wireless broadband network to compete with the likes of AT&T and Verizon. That's fine, if it is able to compete for spectrum on the same terms as everybody else. However, Jeffrey Eisenach of Criterion Economics estimates (conservatively) that this undertaking will cost more than $20 billion over 10 years, and he doubts Mr. Hundt's business plan can deliver on its promises. Mr. Eisenach also notes that the "FCC's history of recovering spectrum from private licensees who fail to meet build-out requirement is discouraging."

That's a reference to NextWave, the telecom firm that won spectrum licenses in a 1996 FCC auction that extended financial credits to "small-business participants." NextWave promptly defaulted on billions of dollars in loan payments but managed to keep the spectrum out of use for nearly a decade, before eventually selling the licenses to Verizon.

That debacle was the handiwork of a certain Reed Hundt, who headed the FCC under Bill Clinton and set the rules of the NextWave auction. We hope history doesn't repeat itself as political farce. If Mr. Hundt's proposal prevails and Frontline Wireless is the top bidder, don't be surprised if it moves to free itself of the license restrictions and then sell the spectrum to a major carrier for a huge profit.

In an attempt to win over Mr. Martin, however, Mr. Hundt is disguising this spectrum grab as a public safety play. He says Frontline's network will be a public-private partnership that provides wireless broadband service to police and fire departments. But Congress has already allocated spectrum for emergency services, along with $1 billion in grants for public safety officials to build a system that's interoperable. First-responders don't need Mr. Hundt's plan.

Mr. Hundt knows how to work the Beltway and he has powerful political friends, who apparently now include Mr. Martin. But we hope someone in the Bush Administration tells Mr. Martin that the FCC's obligation isn't to carve out spectrum for special interests, but to serve the larger public by selling spectrum to the highest bidder.

Telecom Time Warp

By ROBERT W. CRANDALL and HAL J. SINGER

July 11, 2007

Calls for non-discrimination rules in telecom arise periodically from disadvantaged groups of rivals. In the late 1960s, the call for regulation came from equipment providers; in the early 1980s, it came from long-distance providers. In the mid-1990s, it was local exchange carriers and Internet service providers. Today Internet telephone, or "VoIP," providers want help, but to obfuscate their role, they couch it in a deceptive, overused phrase: "network neutrality."

Unfortunately, some lawmakers and regulators are seriously entertaining these pleas for greater regulation. The FCC is considering service rules for the upcoming 700 MHz-auction sponsored by Frontline, a firm headed by former FCC chairman Reed Hundt, which would impose, among other onerous requirements, a net neutrality requirement on the winning bidder. And today Rep. Edward Markey (D., Mass.), chairman of the House Subcommittee on Telecommunications and the Internet, will hold a hearing on the subject of "wireless net neutrality."

When the government decided to impose nondiscrimination rules on (the old) AT&T in the late 1960s, AT&T and its local operating companies controlled virtually the entire telecommunications sector. There were no local competitors, no cable companies offering phone service, not even any wireless companies. AT&T was also vertically integrated into the manufacture of telephone equipment through its ownership of Western Electric. Before its breakup, AT&T had both the incentive (due to its vertical integration) and the ability (due to its market power in voice service) to engage in anticompetitive conduct in complementary markets (equipment).

The telecom environment could not be more different today. There are three survivors of the breakup of AT&T's fixed-wire business, each of which offers phone and high-speed Internet service and is spending billions of dollars upgrading its network to offer video services. Cable television companies have also upgraded their networks so they can offer these services. And the five largest wireless carriers -- AT&T, Verizon, Sprint, T-Mobile and Alltel -- are also spending heavily so that they can offer high-speed Internet connectivity.

Meanwhile, a cable industry consortium last year spent more than $2 billion in a national wireless auction just to acquire the spectrum real estate that would allow it to become the nation's sixth carrier offering nationwide wireless phone service. Not to be left out, Craig McCaw and Intel are building a national fixed wireless network, and Wild Blue is offering a competitive service from an innovative satellite launched last year.

What is the likely impetus for all of this new investment? In 2004, the federal courts required the FCC to relax its strict regulation of the Bell companies in part because of its depressing effect on the Bells' investment spending. And, unlike their European counterparts, U.S. wireless operators have been essentially unregulated since 1993. As a result, U.S. telecom capital spending is surging as various competitors are now moving aggressively to provide high-speed Internet services to consumers who want to receive more than email over a variety of different devices.

To some in Washington, the explosion of investment and entry is interpreted with skepticism and hand-wringing. These worrywarts are pressing for a new regulatory regime of "network neutrality." This would prevent fixed-wire broadband networks from charging content suppliers, such as Google or YouTube, for priority delivery of their services to consumers, much as FedEx routinely does for packages. It would also prevent these operators from building intelligence into their networks, and instead would require them to meet the coming demand for bandwidth-intensive applications solely with fatter, dumber pipes. Such a policy would surely increase the cost of building next-generation, high-speed networks, which in turn would delay investment and increase the price of Internet service.

More recently, the cry for network neutrality has spread to the wireless sector. Proponents of "wireless net neutrality" seek to prevent wireless operators from imposing limitations on certain bandwidth-intensive applications available over their networks. In particular, the Internet telephony (VoIP) companies, such as Skype and Vonage, want regulators to force the wireless companies to allow their subscribers to access these VoIP services through unlimited data plans, thereby allowing subscribers to completely bypass the wireless network owners' voice services. This proposal has been developed by Columbia law professor Timothy Wu.

Mr. Wu and his confreres ignore the fact that no U.S. wireless carrier has market power. In fact, competition in this sector is so intense that according to FCC data, the price of a wireless call has declined from $0.43 per minute in 1995 to $0.07 in 2005 -- roughly 84% in one decade.

This price decline is a function of the number of options facing wireless customers. The lack of market power for any individual carrier makes price reductions irresistible and any anticompetitive practices unsustainable. If consumers were to find that access to VoIP or any other application would increase the value of their wireless experience, surely one or more of the wireless carriers would find it profitable to offer such a service on their own, but not at a loss. If they were forced to allow the VoIP companies such as Skype or Vonage to bid away their own traditional voice revenues, the wireless carriers would simply raise the price of the data services over which Skype or Vonage would be delivered. The obvious losers from such a policy would be the subscribers who rely upon these high-speed data services for other purposes, such as email or Web browsing.

Like wireline operators, wireless operators generally perceive content innovation to be a good thing: The demand for killer applications will drive the demand for faster (and more expensive) broadband connections. Nevertheless, even competitive wireless operators may at first resist offering a service, such as Internet telephony, because it reduces the revenues that they earn from traditional voice services.

But even if all wireless carriers were to decide to block VoIP services on their networks for the foreseeable future, regulators should take a hands-off approach for a number of reasons.

First, the provision of VoIP over other (wireline) platforms provides an outlet for VoIP providers to achieve the requisite economies of scale. Second, the dramatic decline in wireless prices continues with or without VoIP, and the coming entry of the cable companies into wireless services will only accelerate this decline. Third, regulators cannot require wireless networks to allow new Internet voice services to cannibalize the wireless carriers' principal source of revenues without inducing the wireless companies to recover their network costs from other charges to their subscribers. There is no free lunch here -- networks cost money to build and operate.

Thus, even in the single application in which wireless network owners could be said to compete with unaffiliated upstream suppliers, there is no need for regulation. When viewed in this light, network neutrality regulation should be more aptly named: "Life Support for stand-alone VoIP Providers" who are struggling to compete in a world of declining prices and bundled service packages.

With respect to every other conceivable application, regulation would be completely unnecessary, as wireless network owners lack both the incentive and the ability to engage in discriminatory practices because they have no market power.

The lesson for future content providers -- particularly those now seeking network neutrality regulation -- is that they should develop content that network owners will perceive as being complementary to their offerings and therefore will add value for their broadband customers. Ignoring this advice will work only as long as the regulators are under the content providers' thumb.

This is the strategy that Apple's and Microsoft's rivals are using in Europe, with little apparent success. It is even less likely to work on this side of the Atlantic, where the regulatory winds that blow in and out of Washington are constantly changing. Eventually, either the FCC or the courts will realize that regulating competitive networks for the benefit of select content providers is not in the interest of American consumers.

Mr. Crandall is senior fellow in economic studies at the Brookings Institution. Mr. Singer, the president of Criterion Economics, has advised CTIA, a trade association that represents the wireless industry on spectrum issues.

ONE HUNDRED TENTH CONGRESS

U.S. House of Representatives

Committee on Energy and Commerce

Washington, DC 20515–6115

JOHN D. DINGELL, MICHIGAN
CHAIRMAN

July 25, 2007

Mr. Philip L. Verveer
Partner
Willkie Farr & Gallagher
1875 K Street, NW
Washington, DC 20006

Dear Mr. Verveer:

I am writing to thank you for appearing before the Subcommittee on Telecommunications and the Internet on July 11, 2007, to present testimony on our hearing entitled, "Wireless Innovation and Consumer Protection."

Pursuant to the Rules of the Committee, the hearing record remains open to permit Members to submit questions to witnesses. I would appreciate it if you could respond to the attached questions in both paper and electronic form (Word or WordPerfect) no later than the close of business on Wednesday, August 8, 2007, in order to facilitate the printing of the hearing record. Your responses should be delivered to 2322A Rayburn House Office Building, and emailed to the Legislative Clerk at Peter.Kielty@mail.house.gov.

Thank you again for your time and effort in preparing and delivering testimony before the Subcommittee.

Sincerely,

Fred Upton
Ranking Member
Subcommittee on Telecommunications and the Internet

cc: The Honorable Edward J. Markey, Chairman,
Subcommittee on Telecommunications and the Internet
Attachment

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August 2, 2007

VIA HAND DELIVERY

The Honorable Fred Upton
Ranking Member
Subcommittee on Telecommunications and the Internet
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515-6115

Re: July 11, 2007, Hearing on "Wireless Innovation and Consumer Protection"

Dear Representative Upton:

My thanks to Chairman Markey and to you for the opportunity to testify at the July 11, 2007, Subcommittee hearing.

I have attached my responses to the questions presented in your letter of July 25, 2007.

In the event that you or other members of the Subcommittee have any additional inquiries about the subject matter of the July 11 hearing, I would be pleased to respond.

Sincerely,

Philip L. Verveer

cc: The Honorable Edward J. Markey

Attachment

"Wireless Innovation and Consumer Protection"

July 11, 2007

Subcommittee on Telecommunications and the Internet

Philip L. Verveer Responses to Questions Propounded by Rep. Upton

Q 1: Mr. Verveer, do the national wireless carriers today exert the kind of market power that AT&T exerted when the Carterfone rules were put in place?

A: The national wireless carriers do not possess or exercise the kind of market power that AT&T had in 1968 when the Federal Communications Commission decided the Carterfone case. In 1968 the Bell System possessed unchallenged monopolies in local exchange service, long distance service, and telecommunications equipment manufacturing and supply. It provided approximately eighty-five percent of the telephone access lines in the United States and a similar percentage of all of the telecommunications equipment, which its local operating companies obtained virtually exclusively from Western Electric Company, the Bell System's manufacturing arm. At both the federal and the state level, the Bell System operating companies were subject to rate of return regulation. In 1968, the Bell System's power was manifest, among other ways, in tariff provisions that prohibited "foreign attachments," i.e., non-Bell supplied terminal equipment. The Carterfone decision, with some qualifications, eliminated the foreign attachment restriction. In doing so, it enabled in a juridical sense the development of a competitive terminal equipment manufacturing and supply industry.

Today's mobile wireless industry bears no resemblance to the telecommunications industry of early forty years ago. Most obviously, today there are four national and numerous additional wireless carriers offering their services to consumers. There is a very well developed handset (and other terminal device) manufacturing and supply industry. The four national carriers have about eighty five percent of the mobile wireless business, with none of the four enjoying a decisive share advantage over the others. Because the business is workably competitive, they are not subject to rate regulation.

In summary, the market circumstances of today's mobile wireless carriers--the four national firms and all of the others--are completely unlike the circumstances that led to the Carterfone decision.

Q 2: Mr. Verveer, given that the national wireless carriers lack the market power of mid-Twentieth Century AT&T, does it make any sense to impose Carterfone rules on the wireless industry?

A: I believe that it is both unnecessary and potentially counterproductive to impose rules assertedly derived from the Carterfone decision on the wireless industry. The reason that the FCC insisted on the licensing of more than one cellular company in each market in the early 1980s and that Congress took measures to make additional spectrum available for new PCS companies in the early 1990s was that competition would benefit consumers more than regulation. These policy initiatives have been successful in the creation of a workably competitive industry in which the marketplace initiatives and responses of the carriers have afforded consumers with remarkably good and constantly improving performance. The case for government intervention in these kinds of circumstances, stated most generously, is very weak. Very often, in these kinds of circumstances, government intervention is not just unnecessary, but counterproductive for two reasons. First, the presence of regulation can slow the process by which innovations are brought to the marketplace. Second, the presence of regulation invites rent-seeking behavior by all participants--vendors, distributors, regulated entities, and consumers--in the marketplace.

Q 3: Mr. Verveer, in the absence of Carterfone rules, do consumers have adequate protections based on market conditions to ensure that consumers have access to advanced technology at ever lower prices?

A: The history of the mobile wireless industry in the United States confirms the received wisdom about the functioning and value of workably competitive markets. In its roughly twenty five year history, the mobile wireless industry has produced significant advances in technology; *and* it has shared the benefits of technological and other advances with consumers. Proof of this need not be elaborate. The fact that mobile wireless companies are introducing 3G and 4G broadband technologies and services as rapidly as possible, the fact that in twenty five years the number of mobile subscriptions in the US has grown from zero to approximately 240 million, and the fact that we are seeing considerable substitution of wireless phones for wireline phones demonstrate the effectiveness of competition both in producing goods and services that consumers demand and in sharing the "surplus" with them.

Q 4: Mr. Verveer, has the AT&T/iPhone deal given innovative device manufacturers more bargaining power? If so, what is the need for government-managed open access regulations?

A: The recent experience with the Apple iPhone shows that the designers of sufficiently compelling terminal devices can find a ready market for them. The iPhone is important as a demonstration of that reality, but it also is important for another, more fundamental reason. The introduction of the iPhone as exclusive to AT&T has provoked responses from other carriers, just as competition theory would predict. T-Mobile's nearly contemporaneous introduction of a phone and service that switches between mobile wireless and WiFi networks is an example. Thus, while government-managed open access regulations would affect the relative leverage of vendors and distributors in their commercial relationships with one another, it is very unlikely to do anything that on balance is good for consumers.

Q 5: Mr. Verveer, we all know that wireless service providers often subsidize the price that customers pay for wireless devices, and that this is a substantial investment for the carrier. But are there other costs--such as marketing programs, network upgrades, billing-system changes--besides this subsidy that a carrier incurs when rolling out a new handset? Are these the kind of costs and investments that you would expect the carrier to seek to recover, perhaps through the use of term commitments?

A: As the question suggests, there are numerous costs that wireless carriers incur in the process of distributing handsets. The most evident cost, of course, is the sale of the handset at a price lower than the manufacturer's price to the carrier. But more broadly, the creation and operation of a retail distribution chain is a very expensive proposition. By way of example, in addition to real estate and employment costs, there is the full range of marketing costs. I believe that the phenomenon of carrier distribution of handsets is a reflection both of scope economies--it is less expensive to sell both wireless service and the terminal device together rather than separately--and of use of innovative and attractive handsets as an important competitive differentiator. Equally important, the cost of the terminal device, especially in the early days of the mobile wireless industry but continuing to some extent today, created a perceived barrier to consumers' subscribing to wireless service. The subsidized handset combined with a term commitment constituted a form of financing that, based on the exceptional growth of mobile service and the persistence of the practice of subsidizing handsets, consumers found and continue to find attractive. Thus, while carriers could simply charge consumers the full retail price of the handset and the other costs associated with activating service at the outset, the fact that the most commonly selected rate plans spread these costs over twelve or twenty four months should be interpreted as evidence of consumers' preferences.

The use of term commitments is a common and unexceptionable means of assuring that the kind of financing embodied in the deeply discounted handset sale is not defeated by opportunistic behavior. As long as there has been adequate disclosure at the point of sale, there is no reason to believe that this harms either consumers or competitors.

Q 6: Mr. Verveer, wireless networks and devices are growing increasingly complicated, especially as we add data and video features. Moreover, many networks use different technologies and standards, as do many devices. Don't partnerships between carriers and device manufacturers make it easier to optimize networks and devices, thereby improving quality and lowering costs not only for the companies, but also for consumers?

A: As with any complex system, wireless networks require coordination between and among the producers that contribute inputs to the system. Some of the necessary coordination is accomplished through the creation of industry standards. Very commonly, however, a great deal more coordination is required and, again very commonly, this additional coordination is accomplished through contracts. In the case of the specific issues that this hearing addresses, the coordination is between network operators and terminal equipment producers, but it is worth noting that the network operators engage in similar coordination with the manufacturers of network infrastructure and with numerous other vendors. These activities, broadly speaking, are aimed at producing two results. First, they seek to optimize network performance. Second, they seek to provide what consumers are thought to demand. One other point may be worth noting here. There invariably is tension in the relationship between producers (here, handset manufacturers or application vendors) and distributors (here, wireless network operators). This has been the case with respect to every industry with which I am familiar despite the obvious fact of the mutual dependence of producers and distributors. But this is the important point: the received wisdom with respect to public policies addressing these types of vertical arrangements is very clear. Except in unusual circumstances--typically the existence of market power at some level in the vertical chain--there is no consumer welfare-related reason for government intervention.

Q 7: Mr. Verveer, our understanding is that Apple shopped the iPhone, and some carriers took a pass. Doesn't this show that there's a working market? Doesn't it also suggest that Apple, not just AT&T, saw benefits in seeking an exclusive arrangement, perhaps to be able to optimize the device with the network? Wouldn't Carterfone regulations stifle these types of arrangements?

A: The press reports that Apple discussed the iPhone with more than one network shows the market working in at least two ways. First, it shows that Apple had more than one potential "distributor" for its product. It was not forced to make concessions to a carrier with market power because it had alternatives. Second, the reported fact that certain carriers chose not to conclude a deal with Apple shows that they felt they had access to suitable alternatives with which to compete notwithstanding the attractive features of the iPhone.

There are well-known reasons why producers and distributors choose to engage in exclusive arrangements--most obviously, because they believe it will maximize profitable sales. Moreover, the conventional wisdom is that normally consumers benefit more from the interbrand competition that exclusives encourage than from the intrabrand competition that exclusives prevent. "Carterfone regulations" that preclude or impair exclusive arrangements in the context of a workably competitive industry are likely to diminish rather than enhance consumer welfare.

In some circumstances, in addition, the imposition of a duty to deal with any technically compatible terminal device or application may diminish the effectiveness of the transmission network. At a minimum, the imposition of such a duty will require carriers to alter their pricing approaches as part of the process of efficiently managing the shared aspects of their transmission networks.

Q 8: Mr. Verveer, wasn't it our movement away from license assignments and toward unconditioned actions that not only raised billions of dollars for taxpayers, but created the innovative and competitive wireless market we have today?

A: The use of spectrum auctions has raised billions of dollars for public purposes. More importantly, spectrum auctions have enabled the assignment of mobile wireless licenses more quickly than alternative licensing approaches and these licenses, very quickly, have been employed to create a workably competitive industry. It is fair to say that the use of auctions to assign spectrum has been one of the most successful public policies affecting the communications sector in the last several decades.

The licensing of auction-related spectrum with relatively few encumbrances has been important in increasing the auction proceeds. This has coincided with a broader trend in spectrum management that has sought to remove unnecessary and counterproductive requirements. It was common until recent years to license spectrum for specific uses, with resulting limitations and rigidities that prevented it from being deployed where it would be most valuable. The approach in more recent times has been to provide licensees greater flexibility to react to the demands and opportunities of the market, subject to limitations designed to prevent interference.

Q 9: Mr. Verveer, if the open access proposals fail, won't taxpayers be shortchanged by the lower revenues caused by the auction conditions? Wouldn't it be better to let the companies simply bid for the spectrum in a fair auction? That way taxpayers will be protected, competition will drive the spectrum to its best use, and the winners will still be free to operate in an open network if they desire.

A: I agree completely with the premise of the question. The imposition of encumbrances on particular blocks or on all of the spectrum to be licensed inevitably will diminish the payments for the spectrum. Because the mobile wireless industry is workably competitive, there is every reason to believe that if handset locking or application blocking is objectionable to any measurable segment of the consuming public, changes to accommodate consumer demand will occur. Likewise, if there is a significant commercial opportunity in operating a wireless network on a wholesale basis, there is every reason to believe that it will occur.

Q 10: Mr. Verveer, the iPhone is already credited for opening up wireless networks. Since this is happening through market forces, why would we want the FCC micromanaging this process at this stage? Haven't we learned from recent history that forcing carriers to open up their networks doesn't work well?

A: I have the impression that the other wireless carriers are reacting to AT&T's introduction of the iPhone just as one would have predicted, by introducing initiatives of their own.

One of the irrefutable lessons from our experience in requiring both monopoly and non-monopoly networks to accept the interconnection of any compatible terminal device is that it leads to a complicated regulatory enterprise. Implementation of the Part 68 program that followed the Carterfone decision took nearly a decade. Apart from efforts to define and identify in specific instances what is technically compatible is an entire range of market-related regulation. For example: Should the carrier be allowed to offer similar devices? At what price? Is it legitimate to bundle service and equipment in one offering? Should there be protocols governing time to activate where activation is necessary? What type of forum should be available to adjudicate claims of discrimination? In monopoly situations, it is necessary to deal with these kinds of issues. In workably competitive situations, a duty to deal more often than not will invite rent-seeking behavior that does not enhance the welfare of consumers, but that does take the time, attention, and resources of public agencies that could be better devoted to genuinely legitimate issues.

ONE HUNDRED TENTH CONGRESS

U.S. House of Representatives

Committee on Energy and Commerce

Washington, DC 20515–6115

JOHN D. DINGELL, MICHIGAN
CHAIRMAN

July 25, 2007

Mr. Ed Evans
Chief Executive Officer
Stelera Wireless
14701 Dalea Drive
Oklahoma City, OK 73142

Dear Mr. Evans:

I am writing to thank you for appearing before the Subcommittee on Telecommunications and the Internet on July 11, 2007, to present testimony on our hearing entitled, "Wireless Innovation and Consumer Protection."

Pursuant to the Rules of the Committee, the hearing record remains open to permit Members to submit questions to witnesses. I would appreciate it if you could respond to the attached questions in both paper and electronic form (Word or WordPerfect) no later than the close of business on Wednesday, August 8, 2007, in order to facilitate the printing of the hearing record. Your responses should be delivered to 2322A Rayburn House Office Building, and emailed to the Legislative Clerk at Peter.Kielty@mail.house.gov.

Thank you again for your time and effort in preparing and delivering testimony before the Subcommittee.

Sincerely,

Fred Upton
Ranking Member
Subcommittee on Telecommunications and the Internet

cc: The Honorable Edward J. Markey, Chairman,
Subcommittee on Telecommunications and the Internet

Attachment

August 8, 2007

The Honorable Fred Upton
Ranking Member
Subcommittee on Telecommunications and the Internet
U.S. House of Representatives
Committee on Energy and Commerce
Washington, DC 20515-6115

Dear Committee Ranking Member Upton:

I am writing to respond to your correspondence dated July 25, 2007. In your letter you ask the question;

"Mr. Evans, aren't wireless networks a shared environment where one device can monopolize spectrum within a cellsite, depriving service to other customers? Doesn't that make network management critically important, and demonstrate why wireless *Carterfone* would be a disaster?"

The answer to this question is a resounding yes. Unlike traditional wireline networks, a wireless network is not a simple dumb network of wires connecting two particular devices. Wireless networks are comprised of many sometimes-disparate elements that must interface to complete a call or data connection. The hundreds of wireless networks in the United States use different technologies and sometimes even different methods within a given technology to accomplish a particular task. Unlike wireline carriers, wireless carriers depend on third party interoperability intermediaries to complete transactions between disparate networks. Roaming, Short Messaging Services, Data Roaming and many applications rely on third party applications to allow the different elements to communicate. Without tight controls on devices and configurations of those devices the experience of a consumer will not be satisfactory. The consumer will not understand why their particular device does not function properly on a particular network.

In a wireline network few things your neighbor does on their phone or computer will affect your experience as a consumer. In contrast, everything a subscriber sharing your cellsite does will impact your experience. A consumer downloading a large file such as a movie will reduce the speed of your connection. A device that is not configured correctly or experiences a failure on a particular network can render a cell site inoperable to other subscribers. For this and many other reasons wireless carriers subject potential devices to extensive testing prior to allowing them on their networks.

It is my opinion that *Carterfone* like rules imposed on wireless providers will a significantly negative impact on the consumer.

Respectfully,

G. Edward Evans

ONE HUNDRED TENTH CONGRESS

U.S. House of Representatives

Committee on Energy and Commerce

Washington, DC 20515–6115

JOHN D. DINGELL, MICHIGAN
CHAIRMAN

July 25, 2007

Mr. Timothy Wu
Professor of Law
Columbia Law School
435 West 116 Street
New York, NY 10027

Dear Mr. Wu:

I am writing to thank you for appearing before the Subcommittee on Telecommunications and the Internet on July 11, 2007, to present testimony on our hearing entitled, "Wireless Innovation and Consumer Protection."

Pursuant to the Rules of the Committee, the hearing record remains open to permit Members to submit questions to witnesses. I would appreciate it if you could respond to the attached questions in both paper and electronic form (Word or WordPerfect) no later than the close of business on Wednesday, August 8, 2007, in order to facilitate the printing of the hearing record. Your responses should be delivered to 2322A Rayburn House Office Building, and emailed to the Legislative Clerk at Peter.Kielty@mail.house.gov.

Thank you again for your time and effort in preparing and delivering testimony before the Subcommittee.

Sincerely,

Fred Upton

Fred Upton
Ranking Member
Subcommittee on Telecommunications and the Internet

cc: The Honorable Edward J. Markey, Chairman,
Subcommittee on Telecommunications and the Internet
Attachment

QUESTION FOR PROFESSOR WU FROM MR. UPTON:

Professor Wu, the iPhone is already being credited for opening up wireless networks. Since this is happening through free market forces, why would we want the FCC micromanaging this process at this stage? Haven't we learned from recent history that forcing carriers to open up their networks doesn't work well?

Thank you very much for the question. I am, as you are, optimistic that, over time, the iPhone and other electronics companies will serve as one of the forces that opens up the wireless market to greater competition and innovation. But I am not confident that they are enough on their own; I believe that some level of Government oversight remains necessary.

Telecommunications markets have a historic tendency toward monopoly and the use of that monopoly. That said, I do believe that the market can disrupt the use of market power, and open innovation in wireless markets. But I don't think markets are perfect. That is why I believe that the right level of Government involvement—even in an oversight—is essential.

An analogy may help explain my answer. Just as Congress plays an important role watching for abuses of executive power, so I believe Congress and the FCC can play an important role checking and watching for the potential abuses of some of the most powerful private companies in the United States. That is the role I believe that your committee is playing, and I appreciate its role in that regard.

ONE HUNDRED TENTH CONGRESS

U.S. House of Representatives

Committee on Energy and Commerce

Washington, DC 20515–6115

JOHN D. DINGELL, MICHIGAN
CHAIRMAN

July 25, 2007

Mr. Steven E. Zipperstein
General Counsel
Verizon Wireless
1300 I Street, NW, Suite 400 West
Washington, DC 20005

Dear Mr. Zipperstein:

I am writing to thank you for appearing before the Subcommittee on Telecommunications and the Internet on July 11, 2007, to present testimony on our hearing entitled, "Wireless Innovation and Consumer Protection."

Pursuant to the Rules of the Committee, the hearing record remains open to permit Members to submit questions to witnesses. I would appreciate it if you could respond to the attached questions in both paper and electronic form (Word or WordPerfect) no later than the close of business on Wednesday, August 8, 2007, in order to facilitate the printing of the hearing record. Your responses should be delivered to 2322A Rayburn House Office Building, and emailed to the Legislative Clerk at Peter.Kielty@mail.house.gov.

Thank you again for your time and effort in preparing and delivering testimony before the Subcommittee.

Sincerely,

Fred Upton
Ranking Member
Subcommittee on Telecommunications and the Internet

cc: The Honorable Edward J. Markey, Chairman,
Subcommittee on Telecommunications and the Internet
Attachment

1. ***Mr. Zipperstein, in a recent op-ed, Professor Wu alleges that the wireless industry has kept WiFi off of cellphones for competitive reasons. Do you agree with that?***

Professor Wu is simply wrong. A quick check of the marketplace by Professor Wu would show that all of the four national wireless carriers offer and support devices that have Wi-Fi capabilities. These offerings include, for example: Samsung SCH-i730(Verizon Wireless); Verizon Wireless XV6700; Cingular 8125 Pocket PC (AT&T); Cingular 8525 (AT&T); Sprint PCS Vision Smart Device PPC-6700; T-Mobile SDA; T-Mobile Dash; Apple iPhone (AT&T); and all of the devices supported by T-Mobile's T-Mobile@Home service. Frankly, in a competitive market, wireless service providers have every incentive to make desirable devices and features available to consumers. And, a manufacturer of a desirable device does not have to "play ball" with any particular wireless service provider; it needs to find only one of the many providers to support its device.

That being said, wireless carriers have taken different approaches to including certain features on their phones because these decisions have broad consumer ramifications. For example, adding WiFi functionality to a handset can increase the cost of the device by approximately 24 percent. In addition to the cost, WiFi functionality typically adds to the size and weight of a handset, requires additional testing and validation to ensure operation of all the features expected to perform on the WiFi interface, presents new security risks, and causes a greater drain on battery life, which results in a poorer performing handset from a consumer standpoint. Verizon Wireless—like many other carriers—has elected to integrate new network interface standards like WiFi into some handsets it offers, but not all. These decisions have been driven by both the perceived needs of the consumers and the complexity that comes with a more technically intricate device.

Whether or not a carrier offers wireless phones with WiFi capabilities, consumers interested in making WiFi-based voice calls do not need to purchase service from a wireless carrier. They can obtain a WiFi handset. For example, a variety of equipment manufacturers have begun producing handsets to be used on WiFi networks using Skype's VoIP service.

2. ***Mr. Zipperstein, how would Carterfone rules impact innovation?***

Because the wireless service and handset markets are highly competitive and innovative, imposition of *Carterfone*-like regulation is not necessary to spur innovation. There is no monopoly in the wireless service or equipment market comparable to the vertically integrated AT&T and Western Electric of 1968 that *Carterfone* was intended to address. And as music-, video-, and WiFi-phones attest, handset innovation abounds in the wireless industry.

Carterfone and its progeny involved concerns stemming from the existence of a vertically integrated monopoly (*i.e.*, AT&T and Western Electric) seeking to leverage its market power in adjacent markets (*i.e.*, CPE and information services) to the potential detriment of consumers. In the wireless market, the problems *Carterfone* was intended to address do not exist. Far from being dominated by a monopoly provider, the wireless industry is robustly competitive, as the

FCC has repeatedly noted.[1] Moreover, unlike AT&T in 1968, wireless carriers are not engaged in the manufacture of wireless handsets, and the handset-manufacturing sector is vigorously competitive. Handset manufacturers competing in the North American market include Motorola, Nokia, LG, Palm, RIM, Samsung, Kyocera, Sony-Ericsson, and others. New entrants – such as Apple – continue to penetrate the market.

As a result of this competition – and in the absence of regulatory intervention – innovation in wireless handsets flourishes, to the benefit of consumers. According to the Experimental Licensing database maintained by the FCC's Office of Engineering and Technology, the Commission received 623 applications for wireless handset devices in the two-year period from April 2, 2005 through April 2, 2007, and these 623 applications were submitted by 75 different manufacturers. Handset manufacturers vigorously compete to offer the most innovative and cutting edge products and services to wireless customers. For example, Motorola recently unveiled the MotoRAZR maxx Ve, which comes with EV-DO for data, an FM radio, Bluetooth and a 2-megapixel camera with autofocus.[2] Sony Ericsson has introduced the Z750, which is its first HSDPA phone for the North American market and which also supports true push email service that can be tied to an Exchange ActiveSync server so the customer can receive and send emails, as well as other Java-based email programs from third parties.[3] In connection with Sprint Nextel's joint venture with various cable operators, manufacturers also are developing handsets that include such features as allowing customers to control remotely digital video recorders, access cable program guides, and obtain email from their broadband accounts.[4] And T-Mobile has launched a new and innovative "HotSpot @Home" service that enables a user's handset to switch seamlessly between the regular T-Mobile wireless network and Wi-Fi networks, including T-Mobile's HotSpot locations and Wi-Fi networks within a user's home. In short, innovation in the wireless handset market is alive and well.

3. ***Mr. Zipperstein, aren't wireless networks a shared environment where one device can monopolize spectrum within a cellsite, depriving service to other customers? Doesn't that make network management critically important, and demonstrate why wireless Carterfone would be a disaster?***

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[1] *See Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993. Annual Report and Analysis of Competitive Market Conditions with respect to Commercial Mobile Services,* Eleventh Report, 21 FCC Rcd 10947, ¶ 3 (2006) ("*Eleventh Competition Report"*) (finding "effective competition" in the CMRS market and noting that no competitor "has a dominant share of the market," which, according to the Commission, "continues to behave and perform in a competitive manner").

[2] *See* CTIA 2007: In Depth, available at www.phonescoop.com

[3] *Id.*

[4] Marguerite Reardon, *Sprint Nextel, Cable to Test Cell Service,* CNET News.com (April 10, 2006); Marguerite Reardon, *Cable Goes for the Quadruple Play,* CNET News.com (May 30, 2006).

Yes. Wireless communications occur through the medium of a shared spectrum resource. In the context of broadband Internet access, this environment supports "bursty" activities – *e.g.*, e-mail and web browsing – better than high bandwidth activities – *e.g.*, video streaming and file sharing. Unless wireless carriers can manage network resources to meet the needs of the maximum number of users, the quality of service available to all users will be degraded.

The "last mile" of a wireless network is a resource shared with other users and, absent reasonable network management practices, a resource that can be subject to the tragedy of the commons. Unlike wireline networks, which essentially provide each user with a dedicated connection to the network, the radio link between a mobile user and wireless network operates on spectrum shared by all users on-line within the same geographic area. Each mobile user thus has some measurable impact on the availability of a network signal connection to other users in the same geographic area, which varies depending the number of users, the applications they are running, and various other factors (time of day, weather, terrain, etc.) affecting signal strength in the area.

With a shared "last mile" resource on the wireless broadband network, large capacity users can consume a disproportionate share of the available spectrum, which results in degrading or blocking access for other users in the same area. As a result, wireless customers may notice a difference in service when other wireless customers use their handsets for high capacity activities, such as downloading movies or games and peer-to-peer file sharing.

High capacity activities affect the wireless network in significant ways. First, they require much more capacity, eating up the available spectrum allotment in the area where the user is located. Second, they require continuous streams of data usage, which cuts down on the advantages of intermittent use offered by other activities such as Internet browsing and email access. Streaming video content can easily use in one hour the amount of data capacity required by Internet browsing for an entire month. Third, watching a movie keeps a user on-line for hours at a time, rather than in periodic intervals during a day, impairing access by other mobile users for long stretches of time. Moreover, with the advent of data applications, networks have to cope with how software developers have designed their products, sometimes efficiently, sometimes not. The longer an inefficient application is running on a wireless network, the longer it can degrade performance for users in the same area. Mobile service providers must monitor usage on a real-time dynamic basis to ensure that there is an appropriate allocation of the available resources, so the most users have access to the most resources at any given time.

4. Mr. Zipperstein, managed networks are valuable to consumers. These cellular networks protect consumers from spam, unwanted phone calls and even pornography. And consumers get networks and equipment that are tested and free of viruses. My understanding is that the most valuable spectrum for 4G and the cellular carriers could be constrained by the FCC's proposed conditions for the auction. How is that good for consumers?

By constraining the discretion of wireless carriers to manage their networks, the "open access" conditions proposed for certain 700 MHz licenses threaten to harm consumers. Such conditions would increase congestion, and with it the number of blocked and dropped calls.

They also would decrease security on wireless networks – allowing for the introduction of viruses, adware and spyware – and increasing the probability of network and handset failure.

Wireless is a shared medium that consists of interdependent base and mobile stations that share available radio spectrum simultaneously. Allowing users to utilize less efficient and unapproved alternative handsets would undoubtedly decrease the quality of service – meaning more dropped and blocked calls – as well as the efficiency of spectrum re-use, increasing the required number of cell sites, and the cost, to serve the same number of users. Moreover, a requirement that carriers support all applications would result in "bandwidth hogging" by heavy-bandwidth users, limiting the quality of service on the network overall. In order to maximize spectral efficiency, carriers must be able to manage the use of applications that require large amounts of bandwidth or near-constant connections to the network, such as streaming media and peer-to-peer ("P2P") services. "Open access" requirements would undermine the ability of wireless carriers to manage the shared spectrum environment and erode network efficiency.

Imposing "open access" requirements also would make wireless networks less secure and user-friendly. Wireless carriers are subject to two major categories of security breaches: attacks caused by malware downloaded onto mobile devices and external attacks through localized wireless capabilities like WiFi and Bluetooth. So far, instances of such security breaches have been minimized by careful traffic and application management, effective detection-and-removal, and rigorous review of device and feature security in the carrier handset certification process. "Open access" requirements would strip carriers of the ability to perform these critical network and device security functions, jeopardizing consumers' quality of service, if not the continuity of service. Were "open access" requirements adopted, security breaches inevitably would increase, as would the possibility of massive service disruptions over entire networks. Moreover, requiring "open access" would make it difficult for Verizon Wireless to filter adult content from reaching its handsets and thereby help parents prevent access to such content by children. "Open access" conditions would undermine this fail-safe blocking system and, with it, Verizon Wireless's efforts to maintain a family-friendly network.

Furthermore, because the "open access" conditions being proposed for the 700 MHz spectrum are not subject to precise definition, disputes are certain to arise as to whether those conditions have been met. Customer confusion, complaints, and litigation are likely to result, which would only increase the cost to customers and threaten the success of wireless technology over the past decade.